002

Enduring Resources

475 17th Street Suite 1500 Denver Colorado 80202
Telephone 303 573-1222 Fax 303 573 0461

March 17, 2005

Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
P. O. Box 145801
Salt Lake City, Utah 84114-5801

Attn.: Ms. Diana Whitney

RE: Big Pack #12-21-22-2
SENW Sec 2 T12S-R21E
Uintah County, Utah

Dear Ms. Whitney:

Enclosed are two original applications to drill concerning the referenced proposed well.

Enduring Resources, LLC is requesting the Utah Division of Oil, Gas and Mining to hold this application and all future information as confidential.

Enduring Resources is in the process of obtaining the required State of Utah and School and Institutional Trust Lands Administration bonds. The information is expected to be submitted to each agency on Monday March 21, 2005.

If any questions arise or additional information is required, please contact me at 303-350-5114.

Sincerely,

Phyllis Sobotik
Regulatory Specialist

RECEIVED
MAR 18 2005
DIV. OF OIL, GAS & MINING

/ps
Enclosures:
xc: School and Institutional Trust Lands Administration
675 East 500 South, Suite 500
Salt Lake City, Utah 84102
Attn: Mr. Ed Bonner

001

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐
(highlight changes)

APPLICATION FOR PERMIT TO DRILL

5. MINERAL LEASE NO: ML 47084	6. SURFACE: State
7. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A	
8. UNIT or CA AGREEMENT NAME: N/A	
9. WELL NAME and NUMBER: Big Pack 12-21-22-2	
10. FIELD AND POOL, OR WILDCAT:	
11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENW 2 12S 21E	
12. COUNTY: Uintah	13. STATE: UTAH

1A. TYPE OF WORK: DRILL ☑ REENTER ☐ DEEPEN ☐

B. TYPE OF WELL: OIL ☐ GAS ☑ OTHER _____ SINGLE ZONE ☑ MULTIPLE ZONE ☐

2. NAME OF OPERATOR: Enduring Resources, LLC

3. ADDRESS OF OPERATOR: 475 17th St, Suite 1500 CITY Denver STATE CO ZIP 80202 PHONE NUMBER: (303) 350-5114

4. LOCATION OF WELL (FOOTAGES)
AT SURFACE: 1925' FNL 2097' FWL Sec 2 T12S R21 E S.L.B.&M. 39.804597 -109.535967
AT PROPOSED PRODUCING ZONE: Same as above 625331X 4406885Y

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 26-1/2 miles southerly from Ouray

15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET)	16. NUMBER OF ACRES IN LEASE:	17. NUMBER OF ACRES ASSIGNED TO THIS WELL:
1925'	640.28	80
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET)	**19. PROPOSED DEPTH:**	**20. BOND DESCRIPTION:**
N/A	8,100	See cover Letter
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.):	**22. APPROXIMATE DATE WORK WILL START:**	**23. ESTIMATED DURATION:**
6091.8' GR Ungraded	4/15/2005	20 days

24. **PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT	SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT			
12-1/4"	8-5/8" J-55 24#	2,000	65/35 Poz	462 sx	1.81	12.6 ppg
			Prem	236 sx	1.18	15.6 ppg
7-7/8"	4-1/2" N-80/I-80 11.6#	8,100	Prem Lite II	365 sx	3.38	11.0 ppg
			50/50 Poz Cl G	1391 sx	1.31	14.3 ppg

RECEIVED
MAR 18 2005
DIV. OF OIL, GAS & MINING

25. **ATTACHMENTS**

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER
☑ EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER
☑ COMPLETE DRILLING PLAN
☐ FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) Phyllis Sobotik TITLE Regulatory Specialist

SIGNATURE Phyllis Sobotik DATE March 17, 2005

(This space for State use only)

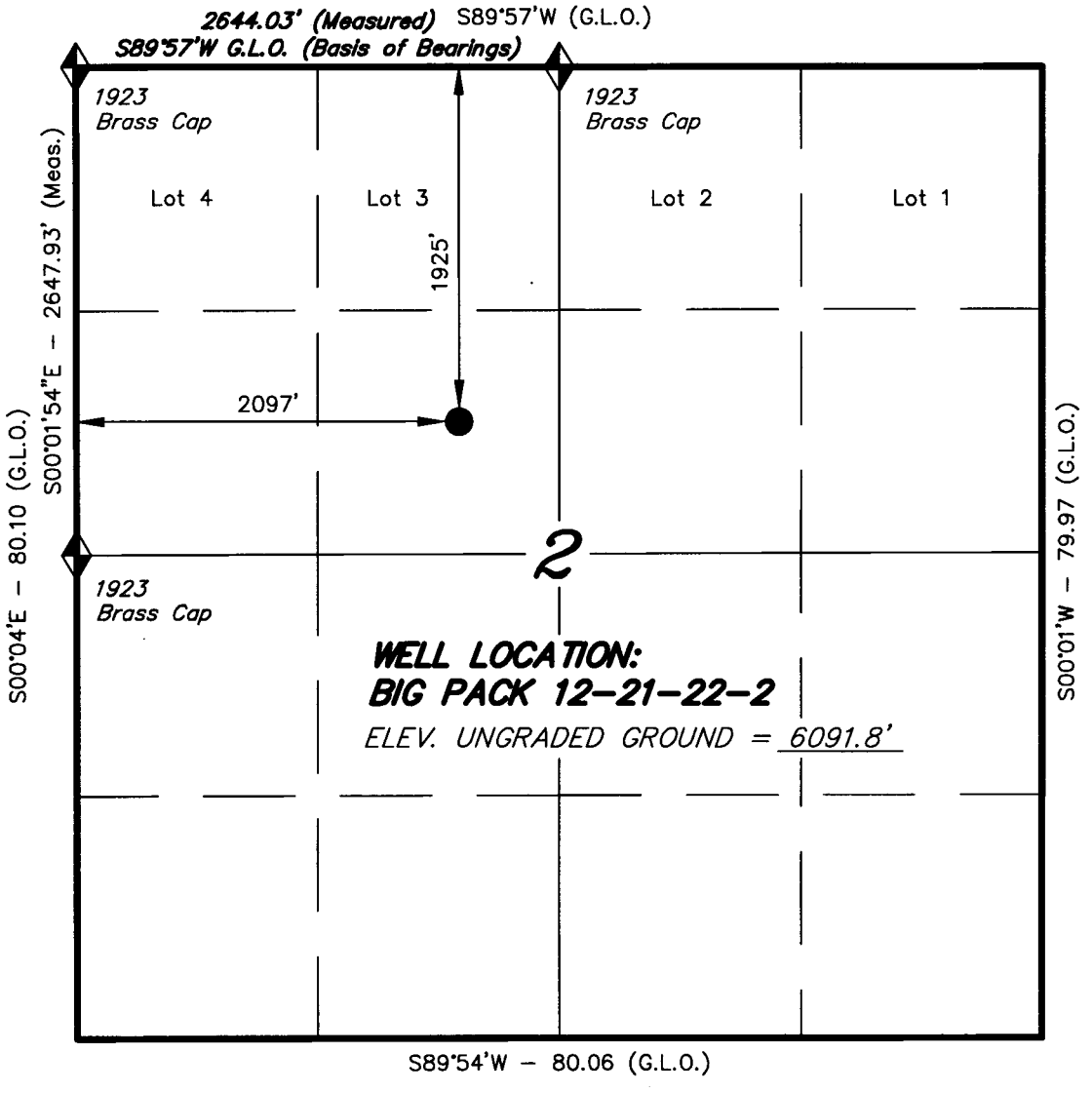
API NUMBER ASSIGNED: 43-047-36423

Approved by the Utah Division of Oil, Gas and Mining
Date: 04-26-05
By: [signature]

CONFIDENTIAL

(11/2001) (See Instructions on Reverse Side)

T12S, R21E, S.L.B.&M.



◆ = SECTION CORNERS LOCATED

BASIS OF ELEV; U.S.G.S. 7-1/2 min QUAD (BIG PACK MTN. SE)

BIG PACK 12-21-22-2
(Surface Location) NAD 83
LATITUDE = 39° 48' 16.71"
LONGITUDE = 109° 32' 12.12"

ENDURING RESOURCES

WELL LOCATION, BIG PACK 12-21-22-2, LOCATED AS SHOWN IN THE SE 1/4 NW 1/4 OF SECTION 2, T12S, R21E, S.L.B.&M. UINTAH COUNTY, UTAH.

N

NOTES:
1. Bearings are based on Global Positioning Satellite observations.

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION No. 189377
STATE OF UTAH

REGISTERED LAND SURVEYOR No.189377 STATE OF UTAH

TRI STATE LAND SURVEYING & CONSULTING
180 NORTH VERNAL AVE. - VERNAL, UTAH 84078
(435) 781-2501

DATE DRAWN: 3-3-05	SURVEYED BY: C.M.	SHEET 1 OF 8
REVISED:	DRAWN BY: F.T.M.	
NOTES:	SCALE: 1" = 1000'	

Enduring Resources, LLC
Big Pack # 12-21-22-2
SENW Sec. 2 T12S-R21E
Uintah County, Utah
Lease # ML 47084

DRILLING PROGRAM

1. **Estimated Tops of Geological Markers:**

Formation	Depth
Green River	442'
Wasatch	3572'
Mesaverde	6069'

2. **Estimated Depths of Anticipated Water, Oil, Gas or Other Minerals: (5512' estimated KB)**

Substance	Formation	Depth
	KB	Unita
Oil / Gas	Green River	442'
Oil /Gas	Wasatch	3572'
Oil /Gas	Mesaverde	6069'
	TD	8100'

A 12-1/4" hole will be drilled to approximately 2000 feet. The depth will be determined by the depth that the Birds Nest zone is encountered. The hole will be drilled 400 feet beyond the top of the Birds Nest zone and surface casing will be set.

3. **Pressure Control Equipment: (3000 psi schematic attached)**

A. Type: Eleven (11) inch double gate hydraulic BOP with eleven (11) inch annular preventer with 3,000 psi Casinghead and 3,000 psi Tubinghead equipped per the attached diagrams for 3,000 psi. BOPE as specified in *Onshore Oil & Gas Order Number 2.* A PVT, Stroke Counter and flow sensor will be installed to check for flow and monitor pit volume.

B. Pressure Rating: 3,000 psi BOPE

C. Kelly will be equipped with upper and lower Kelly valves.

D. Testing Procedure: Annular Preventer

At a minimum, the annular preventer will be pressure tested to 50% of the stack rated working pressure for a period of ten (10) minutes or until provisions of the test are met, whichever is longer.

At a minimum, the above pressure test will be performed:
1. When the annular preventer is initially installed;
2. Whenever any seal subject to test pressure is broken;
3. Following related repairs; and

4. At thirty (30) day intervals.

In addition to the above, the annular preventer will be functionally operated at least weekly.

Blow-Out Preventer

At a minimum, the BOP, choke manifold, and related equipment will be pressure tested to the approved working pressure of the BOP stack (if isolated from the surface casing by a test plug) or to 70% of the internal yield strength of the surface casing (if the BOP is not isolated from the casing by a test plug). Pressure will be maintained for a period of at least ten (10) minutes or until the requirements of the test are met, whichever is longer.

At a minimum, the above pressure test will be performed:
1. When the BOP is initially installed;
2. Whenever any seal subject to test pressure is broken;
3. Following related repairs; and
4. At thirty (30) day intervals.

In addition to the above, the pipe and blind rams will be activated each trip, but not more than once each day. All BOP drills and tests will be recorded in the IADC driller's log.

D. Miscellaneous Information:

The blowout preventer and related pressure control equipment will be installed, tested and maintained in compliance with the specifications in and requirements of *Onshore Oil & Gas Order Number 2.*

Totco directional surveys will be dropped every 2000 feet. Maximum allowable angle is 5 degrees.

4. Proposed Casing & Cementing Program:

A. Casing Program: All New

Hole Size	Casing Size	Wt./Ft.	Grade	Joint	Depth Set (md)
12-1/4"	8-5/8"	24#	J-55	ST&C	0 – 2,000' est
7-7/8"	4-1/2"	11.6#	N-80/I-80	LT&C	0 – 8,100'

The surface casing will have guide shoe, 1 jt., insert float collar. Centralize the first 3 joints with bowspring centralizers. Thread lock guide shoe.

Casing string(s) will be pressure tested to 0.22 psi/foot of casing string length or 1500 psi, whichever is greater (not to exceed 70% of the internal yield strength of the casing), after cementing and prior to drilling out from under the casing shoe.

B. Casing Design Parameters:

Depth (md)	Casing	Collapse(psi)/SF	Burst (psi)/SF	Tension(mlbs)/SF
2000	8-5/8", 24#/ft, J55, STC	1370/1.53(a)	4460/4.98(b)	244/5.08(J)(c)
8100	4-1/2", 11.6#/ft, N-80, LTC	6350/1.52 (d)	7780/2.02 (e)	223/2.37(J) (f)

(a.) based on full evacuation with 8.6 ppg fluid on annulus
(b.) based on 8.6 ppg gradient with no fluid on annulus
(c.) based on casing string weight in 8.6 ppg mud
(d.) based on full evacuation with 10.0 ppg fluid on annulus, pipe evacuated
(e.) based on 9.2 ppg gradient, gas to surface, with no fluid on annulus, no gas gradient.
(f.) based on casing string weight in 9.2 ppg mud

PROPOSED CEMENTING PROGRAM

Surface Casing (if well will circulate)-Cemented to surface

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	EXCESS (%)	WEIGHT (ppg)	YIELD (ft^3/sx)
8-5/8"	Lead	1500	65/35 POZ +6% Gel +10 pps gilsonite + .25 pps Flocele + 3% salt BWOW	462	35%	12.6	1.81
8-5/8"	Tail	500	Premium cmt +2% CaCl +.25 pps flocele	236	35%	15.6	1.18

A cement top job is required if cement fallback is greater than 10' below ground level. Top job cement will be premium cement w/2% CaCl. Volume as required.

Surface Casing (if well will not circulate)-Cemented to surface

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	EXCESS (%)	WEIGHT (ppg)	YIELD (ft^3/sx)
8-5/8"	Lead	500	Premium cmt + 2% CaCl +.25 pps flocele	280	60	15.6	1.18
8-5/8"	Top job	As req.	Premium cement + 2% CaCl	Req.		15.6	1.18

Production Casing and Liner-Cemented TD to Surface

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	EXCESS (%)	WEIGHT (ppg)	YIELD (ft^3/sx)
4-1/2"	Lead	3100	Premium Lite II +3% KCL +0.25 pps celloflake +5 pps gilsonite +10% gel +0.5% extender	365	60	11.0	3.38
4-1/2"	Tail	5000	50/50 POZ Class G +10% salt + 2% gel + 1% R-3	1391	60	14.3	1.31

Cement volumes for the 4-1/2" Production Casing will be calculated to provide a top of cement to surface. Cement volumes are approximate and were calculated under the assumption that a gauge hole will be achieved. Actual cement volumes may vary due to variations in the actual hole size and will be determined by running a caliper log on the drilled hole.

All waiting on cement (WOC) times will be adequate to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drilling out.

5. Drilling Fluids (mud) Program:

Interval	Mud Weight	Fluid Loss	Viscosity	Mud Type
0' – 2000'		No cntrl		Air/mist
2000'-3000'	8.4-8.6	No cntrl	28-36	Water
3000'-8100'	8.8-9.8	8 - 10 ml	32-42	Water/Gel

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blowout will be available at the well site during drilling operations.

6. Evaluation Program:

Logs: DIL-SFL/GR Caliper: TD to BSC
CNL / LDT / GR: TD to BSC

Tests: No tests are currently planned.

Stimulation: A stimulation or frac treatment will be designed for completion of this well based on openhole log analysis. The drill site, as approved, will be sufficient size to accommodate all completion activities.

7. Abnormal Conditions:

No abnormal temperatures or pressures are anticipated. No H_2S has been encountered or known to exist from previous wells drilled to similar depths in the general area.

Maximum anticipated bottom hole pressure equals approximately 3200 psi (calculated at 0.4 psi/foot of hole) and maximum anticipated surface pressure equals approximately 1440 psi (anticipated bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot of hole).

8. Anticipated Starting Dates:

A. Anticipated Commencement Date- April 15, 2005
Drilling Days- Approximately 20 days
Completion Days - Approximately 15 days

9. Variances:

None anticipated

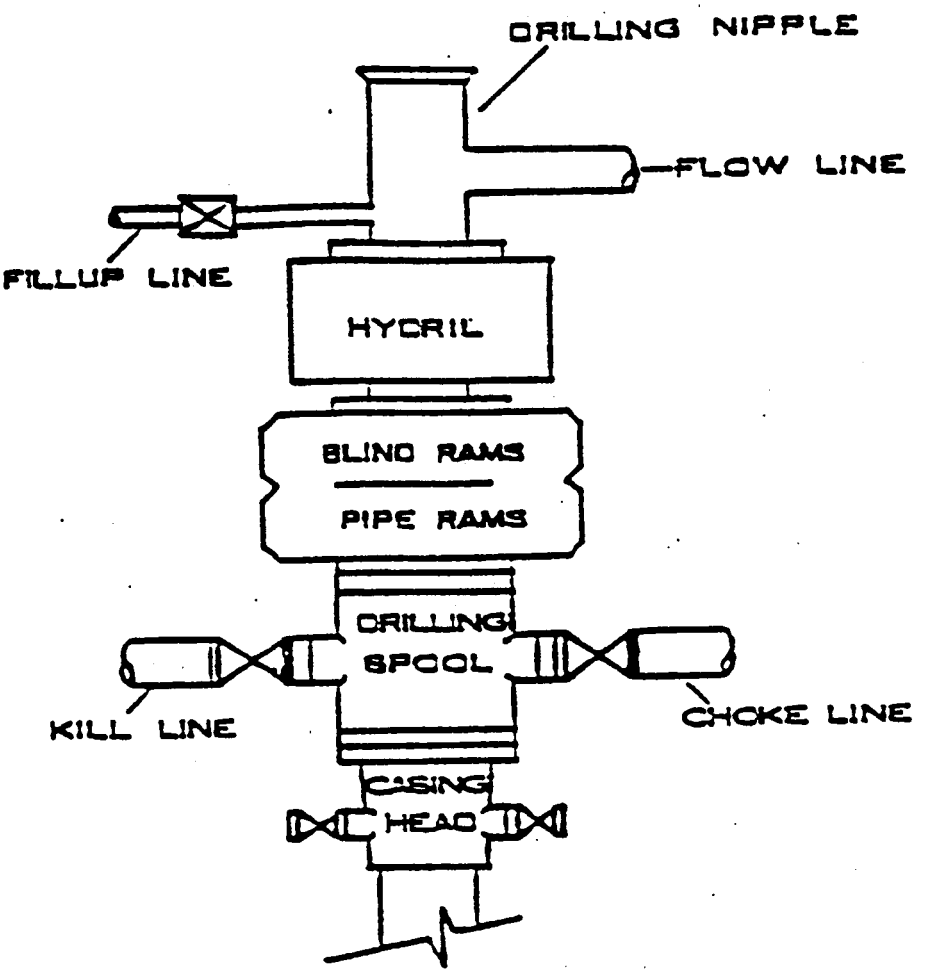
10. Other:

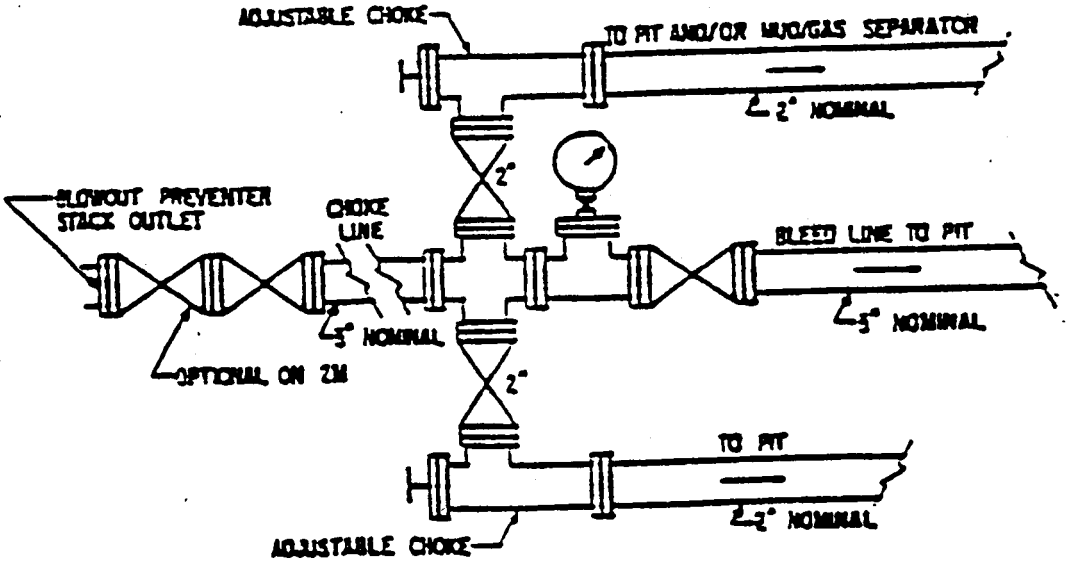
The School and Institutional Trust Lands Administration were provided a copy of the Application for Permit to Drill and a Cultural Resource Inventory Report.

School and Institutional Trust Lands Administration
675 East 500 South, Suite 500
Salt Lake City, Utah 84102
Attn: Mr. Ed Bonner

3,000 PSI

BOP STACK





Enduring Resources, LLC
Big Pack # 12-21-22-2
SENW Sec. 2 T12S-R21E
Uintah County, Utah
Lease # ML 47084

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. Existing Roads:

Directions to the proposed location are attached.

Refer to Topo Maps A and B for location of access roads within a two (2) mile radius.

All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.

2. Planned Access Roads:

Approximately two hundred and forty (240) feet of access road is proposed. Please refer to Topo Map B.

The access road will be crowned (2 to 3%), ditched and constructed with a running surface of eighteen (18) feet and a maximum disturbed width of thirty (30) feet. Graveling or capping the roadbed will be performed as necessary to provide a well constructed, safe road. Prior to construction or upgrading, the proposed road shall be cleared of any snow and allowed to dry completely.

Surface disturbance and vehicular traffic will be limited to the proposed location and proposed access route. Any additional area needed will be approved in advance. All construction shall be in conformance with the standards outlined in the BLM and Forest Service publication: Surface Operating Standards for Oil and Gas Exploration and Development. 1989.

The road surface and shoulders will be kept in a safe usable condition and will be maintained in accordance with the original construction standards. All drainage ditches will be kept clear and fee flowing and will be maintained according to original construction standards. The access road surface will be kept free of trash during operations. All traffic will be confined to the approved disturbed surface. Road drainage crossings shall be designed so they will not cause siltation or accumulation of debris in the drainage crossing or shall the drainages be blocked by the road bed. Erosion of drainage ditches by runoff water shall be prevented by diverting water off at frequent intervals by means of cutouts. Should mud holes develop, they shall be filled in and detours around them avoided. When snow is removed from the road during the winter months, the snow shall be pushed outside of the borrow ditches and the turnouts kept clear so that snowmelt will be channeled away for the road.

3. Location of Existing Wells Within a One Mile Radius:

There are currently no wells within a one (1) mile radius.

4. Location of Existing & Proposed Facilities:

The following guidelines will apply if the well is productive:

All production facilities will be located on the disturbed portion of the well pad and at a minimum of twenty-five (25) feet from the toe of the back slope or the top of the fill slope.

A dike will be constructed completely around those production facilities which contain fluids (i.e. production tanks, produced water tanks and/or heater treater.) These dikes will be constructed of compacted subsoil, be impervious, hold 100% of the capacity of the largest tank and be independent of the back cut.

All permanent (on-site six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the five state Rocky Mountain Inter-Agency Committee.

All facilities will be painted within six (6) months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The requested color is Carlsbad Canyon (2.5Y 6/2).

Any necessary pits will be properly fenced to protect livestock and prevent wildlife entry. Approximately fifteen thousand two hundred and ninety five (15,295) feet (approximately 2.90 miles) of pipeline is proposed. Please refer to the attached Topo Map D.

5. Location and Type of Water Supply:

Water for drilling purposes will be obtained from Tu and Frum, Inc. Water User Claim #49-2185, Application #T75517, or from Target Trucking Water User Claim #43-2195, or from Dalbo Inc. Water User Claim #43-8496.

Water will be hauled to the location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

6. Source of Construction Materials:

Surface and subsoil materials in the immediate area will be utilized.

Any gravel will be obtained from a commercial source.

7. Methods of Handling Waste Materials:

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids, including salts and chemicals, will be contained in the reserve pit. Upon termination of drilling and completion operations, the liquid contents of the reserve pit will be removed and disposed of at an approved waste disposal facility within one hundred twenty (120) days after drilling is terminated.

The reserve pit will be constructed on the location and will not be located within natural drainage, where a flood hazard exits or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that is will not leak, break or allow discharge of liquids.

A plastic reinforced liner is to be used. It will be a minimum of sixteen (16) mil thick and felt with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and / or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit.

Any spills of oil, salt water or other noxious fluids will be immediately cleaned up and removed to an approved disposal site.

A chemical portable toilet will be furnished with the drilling rig.

Garbage, trash and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. No trash will be burned on location.

All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig.

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than ten thousand (10,000) pounds will be used, produced, stored, transported or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported or disposed of in association with the drilling of this well.

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to an approved disposal site.

8. Ancillary Facilities:

None are anticipated.

9. Well Site Layout: (See Diagrams #2, #3 & #4)

The attached Location Layout Diagrams describes drill pad cross-sections, cuts and fills and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s) and surface material stockpiles(s).

Please see the attached diagram for rig orientation and access roads.

All pits shall be fenced to the following minimum standards:

Thirty-nine (39) inch net wire shall be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.

The net wire shall be no more than two (2) inches above the ground. The barbed wire shall be three (3) inches over the new wire. Total height of the fence shall be at least forty-two (42) inches.

Corner posts shall be cemented and / or braced in such a manner to keep the fence tight at all times.

Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two (2) fence posts shall be no greater than sixteen (16) feet.

All wire shall be stretched by, using a stretching device, before it is attached to corner posts.

The reserve pit fencing will be on three (3) sides during drilling operations and on the fourth (4) side when the rig moves off location. Pits will be fenced and maintained until cleanup.

Location size may change prior to drilling the well due to the current rig availability. If the proposed location is not large enough to accommodate the drilling rig, the location will be re-surveyed and a Form 9 will be submitted.

10. Plans for Surface Reclamation:

Producing Location:

Immediately upon well completion, the location and surrounding area will be cleared of ll unused tubing, materials, trash and debris not required for production.

Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 40 CFR 3162.7.

Before any dirt work associated with location restoration takes place, the reserve pit shall be as dry as possible. All debris in it will be removed. Other waste and spoil materials will be disposed of immediately upon completion of operations.

The reserve pit and that portion of the location not needed for production facilities / operations will be re-contoured to the approximate natural contours. The reserve pit will be reclaimed within ninety (90) days for the date of well completion, weather permitting.

To prevent surface water(s) from standing (ponding) on the reclaimed reserve pit area, final reclamation of the reserve pit will consist of "mounding" the surface three (3) feet above surrounding ground surface to allow the reclaimed pit area to drain effectively.

Upon completion of backfilling, leveling and re-contouring, the stockpiled topsoil will be spread evenly over the reclaimed area(s).

Dry Hole / Abandoned Location:
Abandoned well sites, roads and other disturbed areas will be restored as near as practical to their original condition. Where applicable, these conditions include the re-establishment of irrigation systems, the re-establishment of appropriate soil conditions and re-establishment of vegetation as specified.

All disturbed surfaces will be re-contoured to the approximate natural contours with reclamation of the well pad and access road to be performed as soon as practical after final abandonment. If necessary, re-seeding operations will be performed after completion of other reclamation operations.

11. Surface Ownership:

School and Institutional Trust Lands Administration
675 East 500 South, Suite 500
Salt Lake City, Utah 84102
Attn: Mr. Ed Bonner

12. Other Information:

Lease Wildlife Stipulations: None

All lease operations shall be conducted in such a manner that full compliance is made with all applicable laws, regulations, the approved Plan of Operations and any applicable Notice of Lessees. The Operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance. The Operator will control noxious weeds along Rights-Of-Way for roads, pipelines, well sites or other applicable facilities.

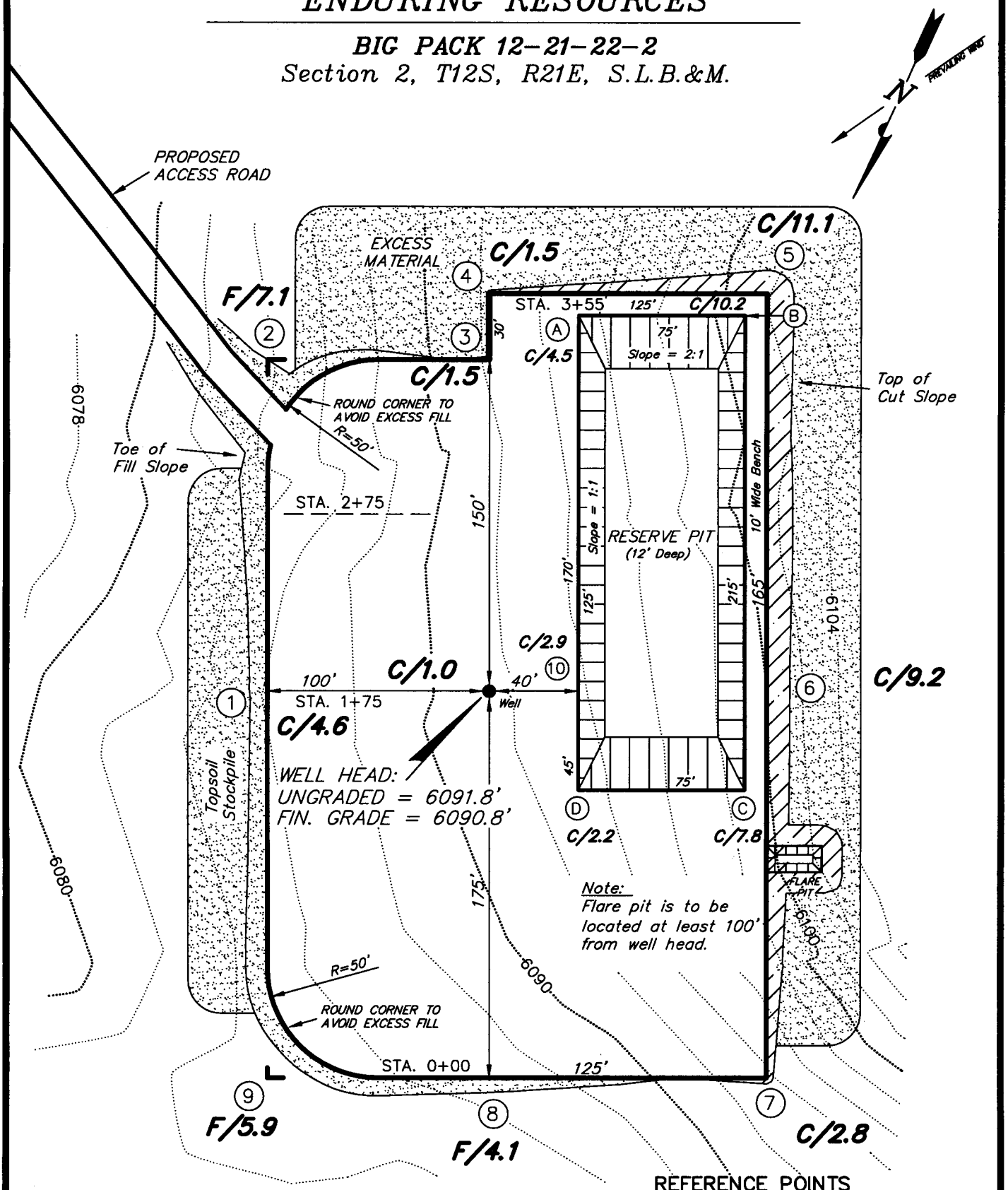
Directions to the Big Pack 12-21-22-2 Well Pad

Beginning at the city of Ouray, Utah. Leave the city of Ouray heading south on Turkey Trak road for a distance of approximately 9.1 miles to a point where the road forks. Turn left onto Seep Ridge Road and continue heading southeast for a distance of approximately 2.3 miles where there is a turn-off to the left. Do not turn left. Continue heading southerly on Seep Ridge Road for a distance of approximately 12.2 miles (4.2 plus 3.3 plus 4.7, see topographic map A) to a turn-off to the left. Turn left and head easterly (road turns south then north) for a distance of approximately 2.9 miles to the proposed access for the Big Pack 12-21-22-2 well pad. Turn left onto the proposed access, which heads northwest for a distance of approximately 240 feet.

ENDURING RESOURCES

BIG PACK 12-21-22-2

Section 2, T12S, R21E, S.L.B.&M.



REFERENCE POINTS

150' NORTHEASTERLY = 6081.9'

200' NORTHEASTERLY = 6080.4'

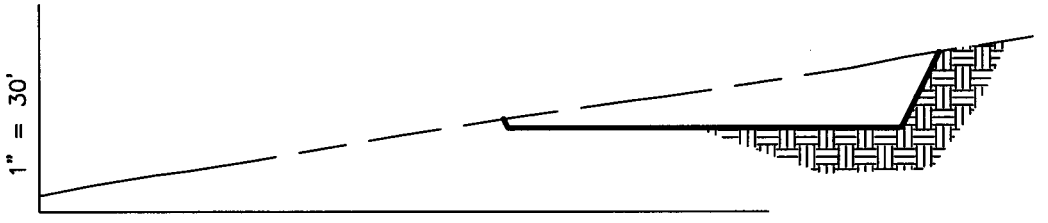
SURVEYED BY:	C.M.	DATE DRAWN:	3-1-05
DRAWN BY:	F.T.M.	SCALE:	1" = 60'
NOTES:			

Tri State Land Surveying, Inc. (435) 781-2501
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

ENDURING RESOURCES

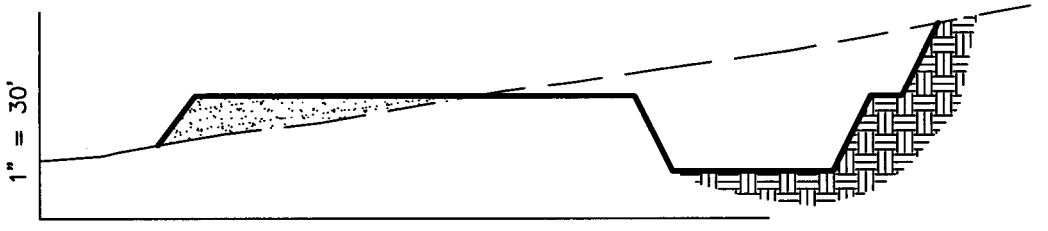
CROSS SECTIONS

BIG PACK 12-21-22-2



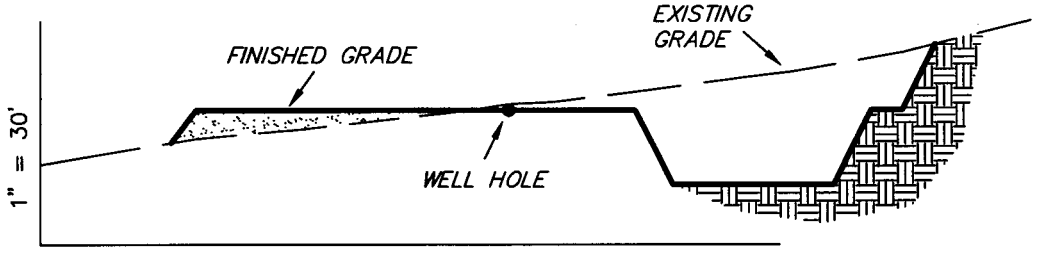
1" = 60'

STA. 3+55



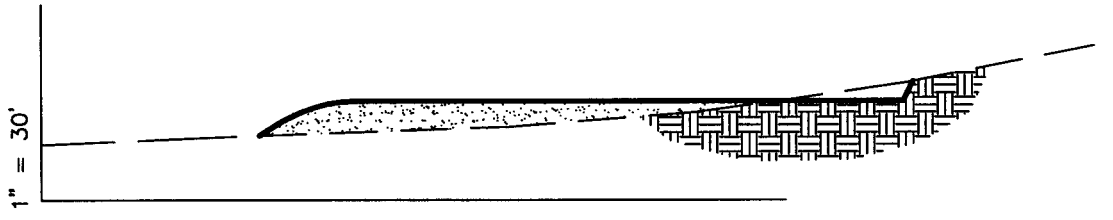
1" = 60'

STA. 2+75



1" = 60'

STA. 1+75



1" = 60'

STA. 0+00

ESTIMATED EARTHWORK QUANTITIES
(No Shrink or swell adjustments have been used)
(Expressed in Cubic Yards)

ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	6,740	4,680	Topsoil is not included in Pad Cut	2,060
PIT	5,390	0		5,390
TOTALS	12,130	4,680	1,570	7,450

NOTE:
UNLESS OTHERWISE NOTED
CUT SLOPES ARE AT 1:1
FILL SLOPES ARE AT 1.5:1

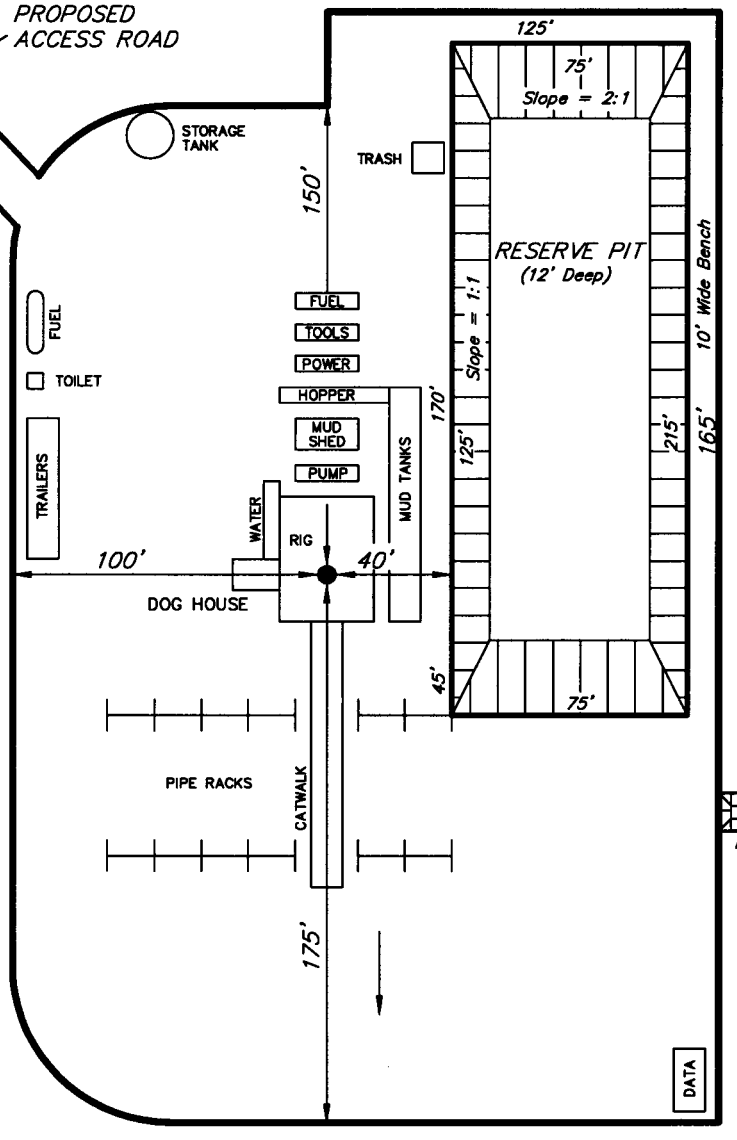
SURVEYED BY:	C.M.	DATE DRAWN:	3-1-05
DRAWN BY:	F.T.M.	SCALE:	1" = 60'
NOTES:			

Tri State Land Surveying, Inc.
(435) 781-2501
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

ENDURING RESOURCES

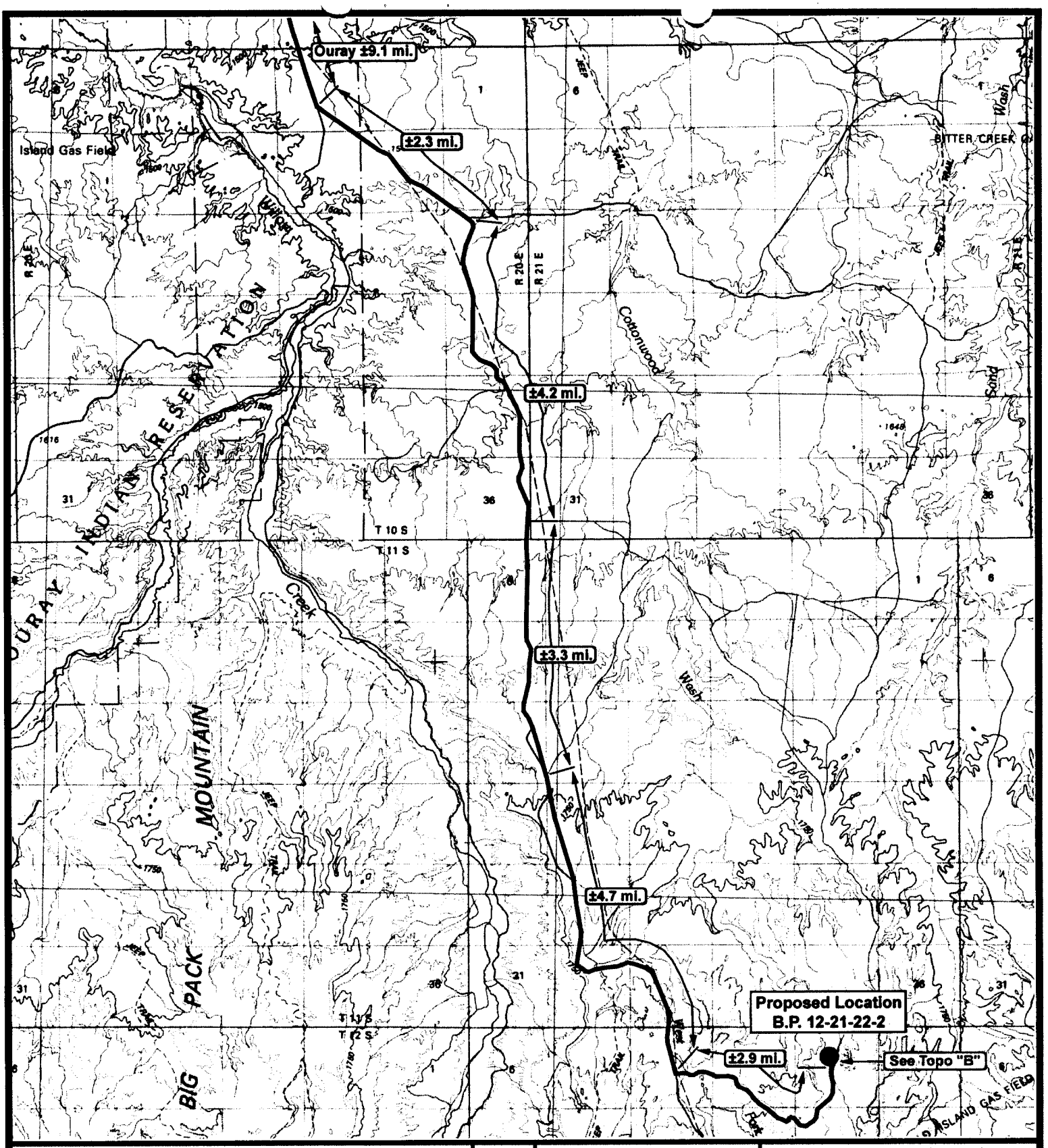
TYPICAL RIG LAYOUT

BIG PACK 12-21-22-2



Note:
Flare pit is to be located at least 100' from well head.

SURVEYED BY:	C.M.	DATE DRAWN:	3-1-05	Tri State Land Surveying, Inc. (435) 781-2501 180 NORTH VERNAL AVE. VERNAL, UTAH 84078	SHEET 4 OF 8
DRAWN BY:	F.T.M.	SCALE:	1" = 60'		
NOTES:					



ENDURING
-Resources-

Big Pack 12-21-22-2
SEC 2, T12S, R21E, S.L.B.&M.

N

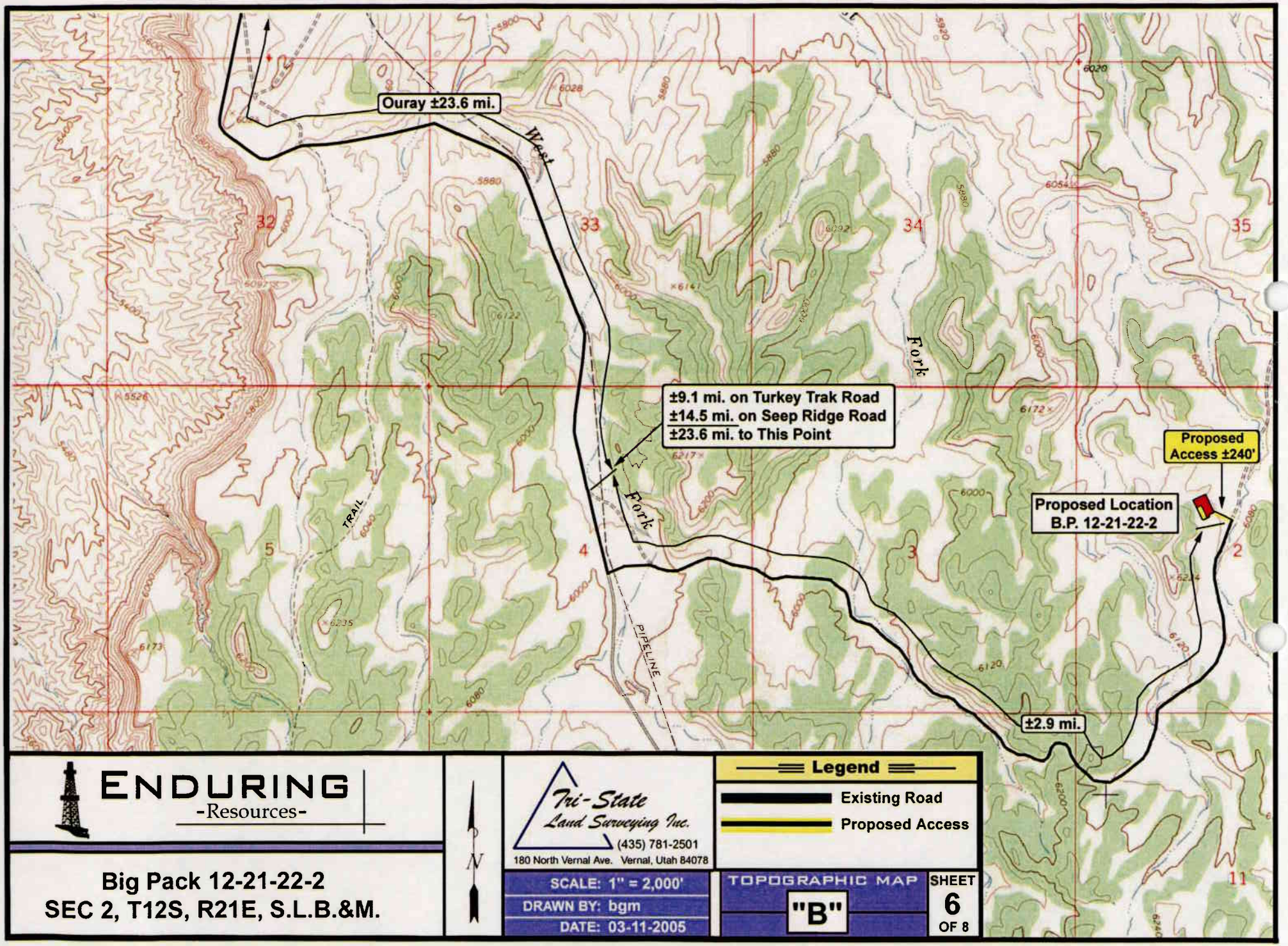
Tri-State Land Surveying Inc.
(435) 781-2501
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 100,000'
DRAWN BY: bgm
DATE: 03-11-2005

Legend
Existing Road
Proposed Access

TOPOGRAPHIC MAP "A"

SHEET 5 OF 8



ENDURING
-Resources-

Big Pack 12-21-22-2
SEC 2, T12S, R21E, S.L.B.&M.

N

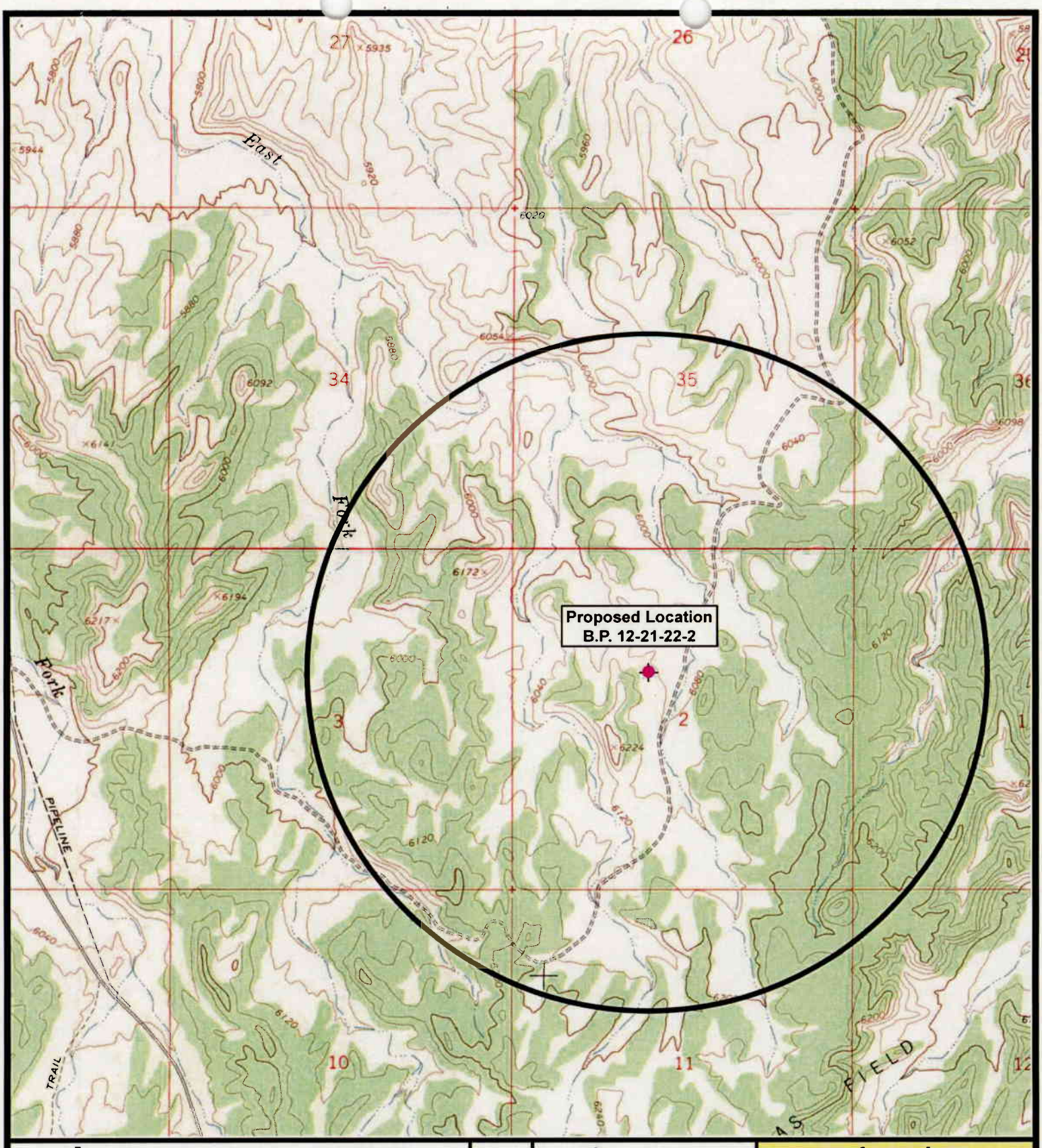
Tri-State Land Surveying Inc.
(435) 781-2501
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2,000'
DRAWN BY: bgm
DATE: 03-11-2005

Legend
Existing Road
Proposed Access

TOPOGRAPHIC MAP "B"

SHEET 6 OF 8



ENDURING
-Resources-

Big Pack 12-21-22-2
SEC 2, T12S, R21E, S.L.B.&M.

N

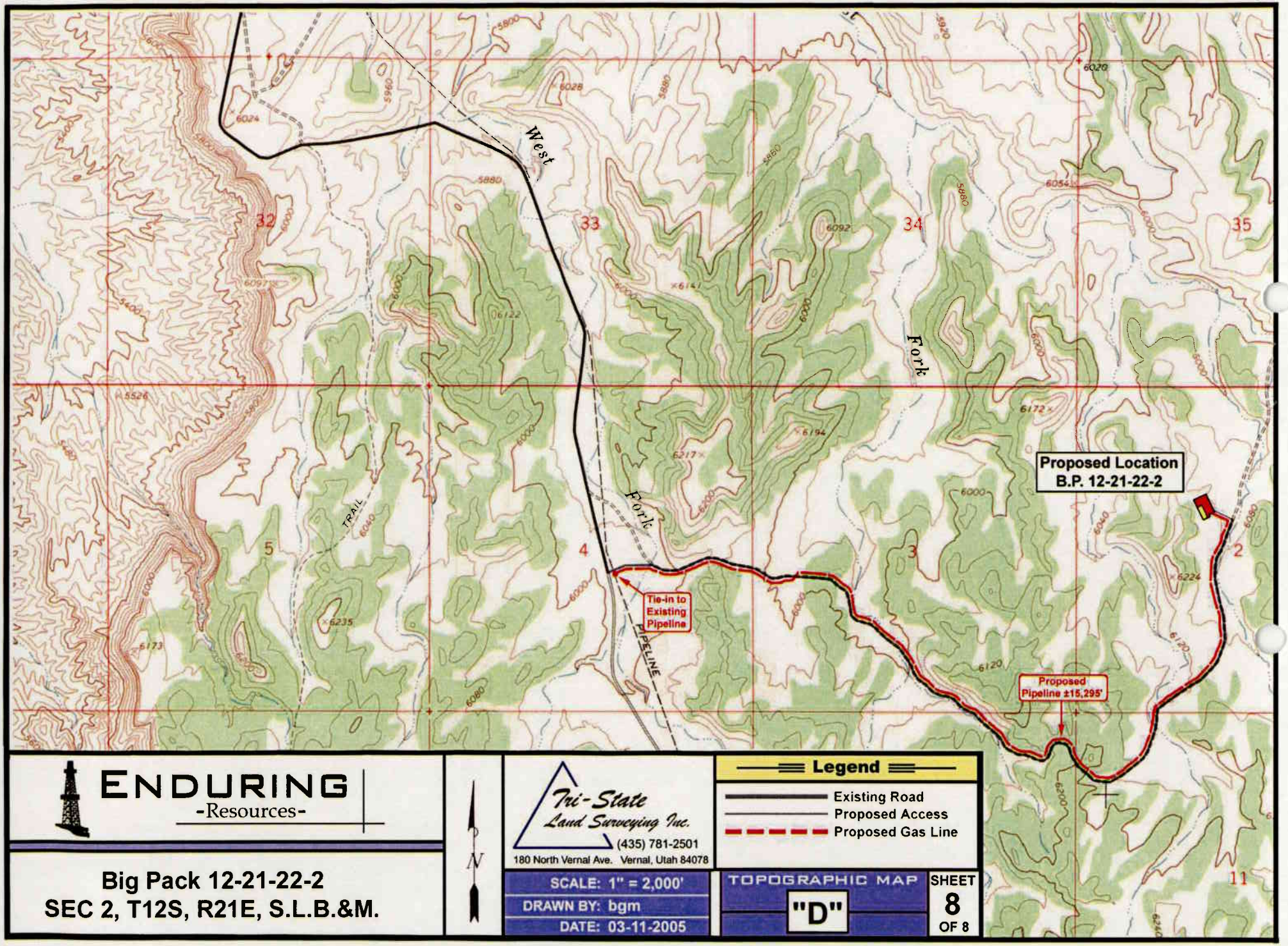
Tri-State Land Surveying Inc.
(435) 781-2501
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2,000'
DRAWN BY: bgm
DATE: 03-17-2005

Legend
Location
One-Mile Radius

TOPOGRAPHIC MAP "C"

SHEET 7 OF 8



ENDURING
-Resources-

Big Pack 12-21-22-2
SEC 2, T12S, R21E, S.L.B.&M.

N

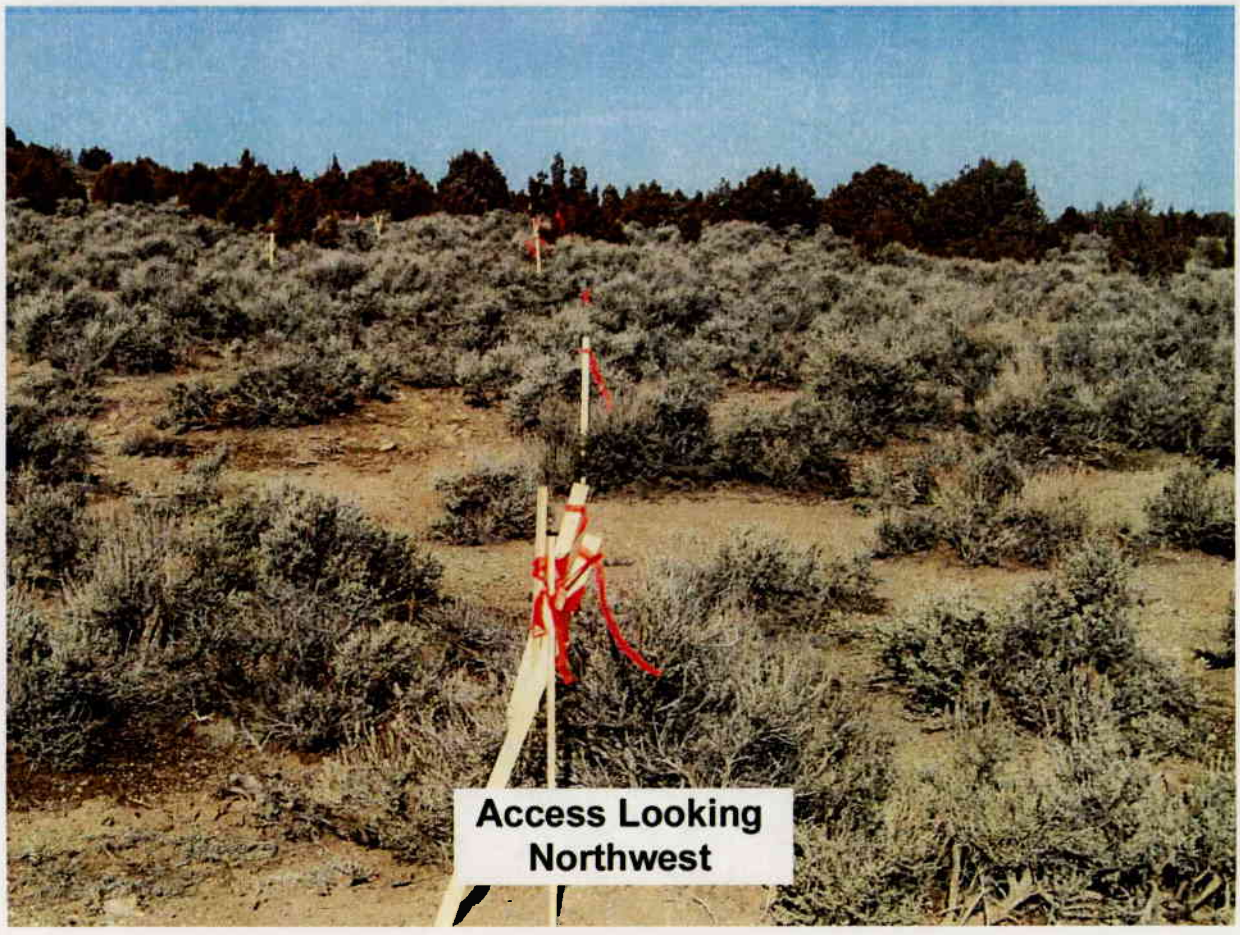
Tri-State Land Surveying Inc.
(435) 781-2501
180 North Vernal Ave. Vernal, Utah 84078

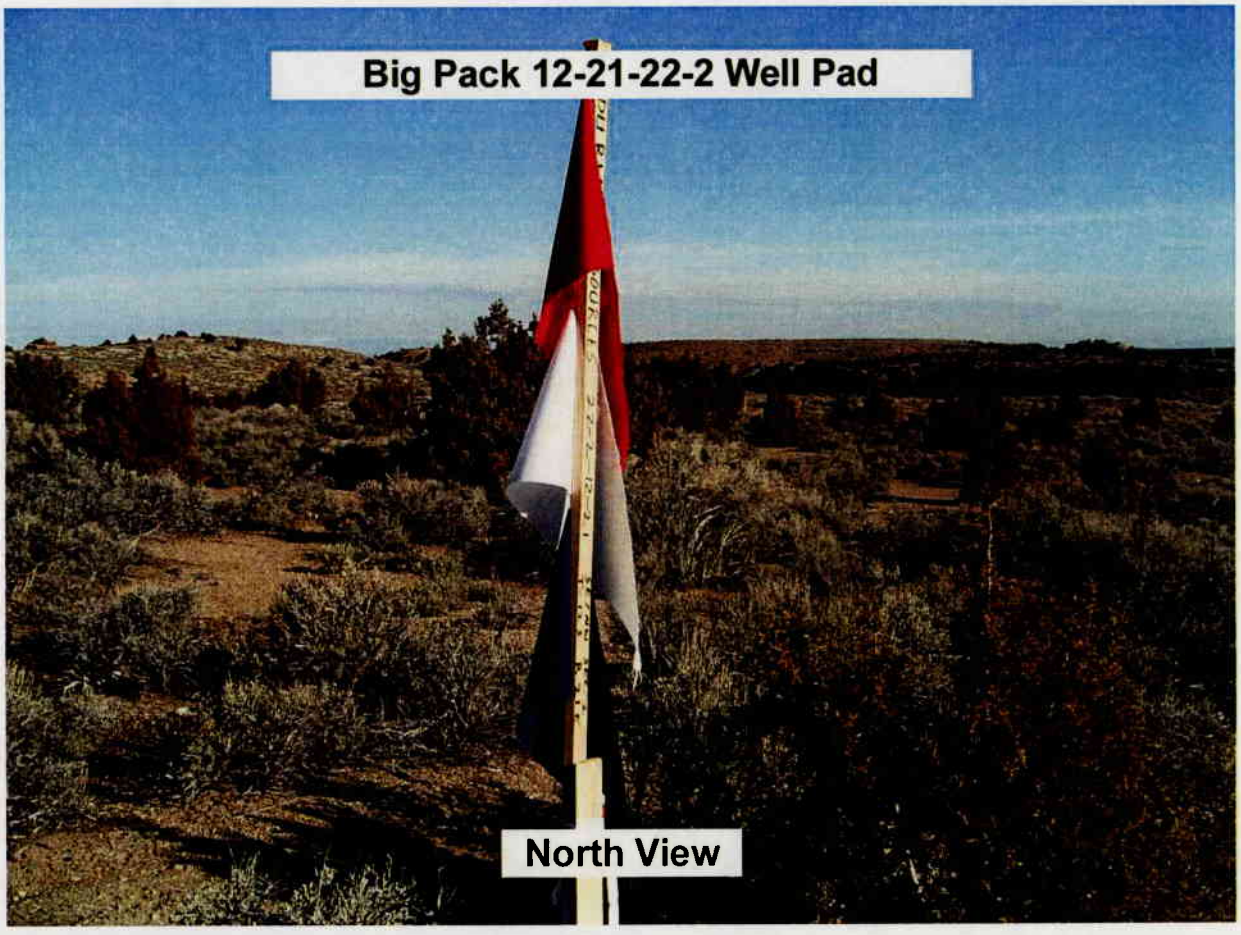
SCALE: 1" = 2,000'
DRAWN BY: bgm
DATE: 03-11-2005

TOPOGRAPHIC MAP "D"

SHEET 8 OF 8


Big Pack 12-21-22-2 Well Pad
Well Pad Sign

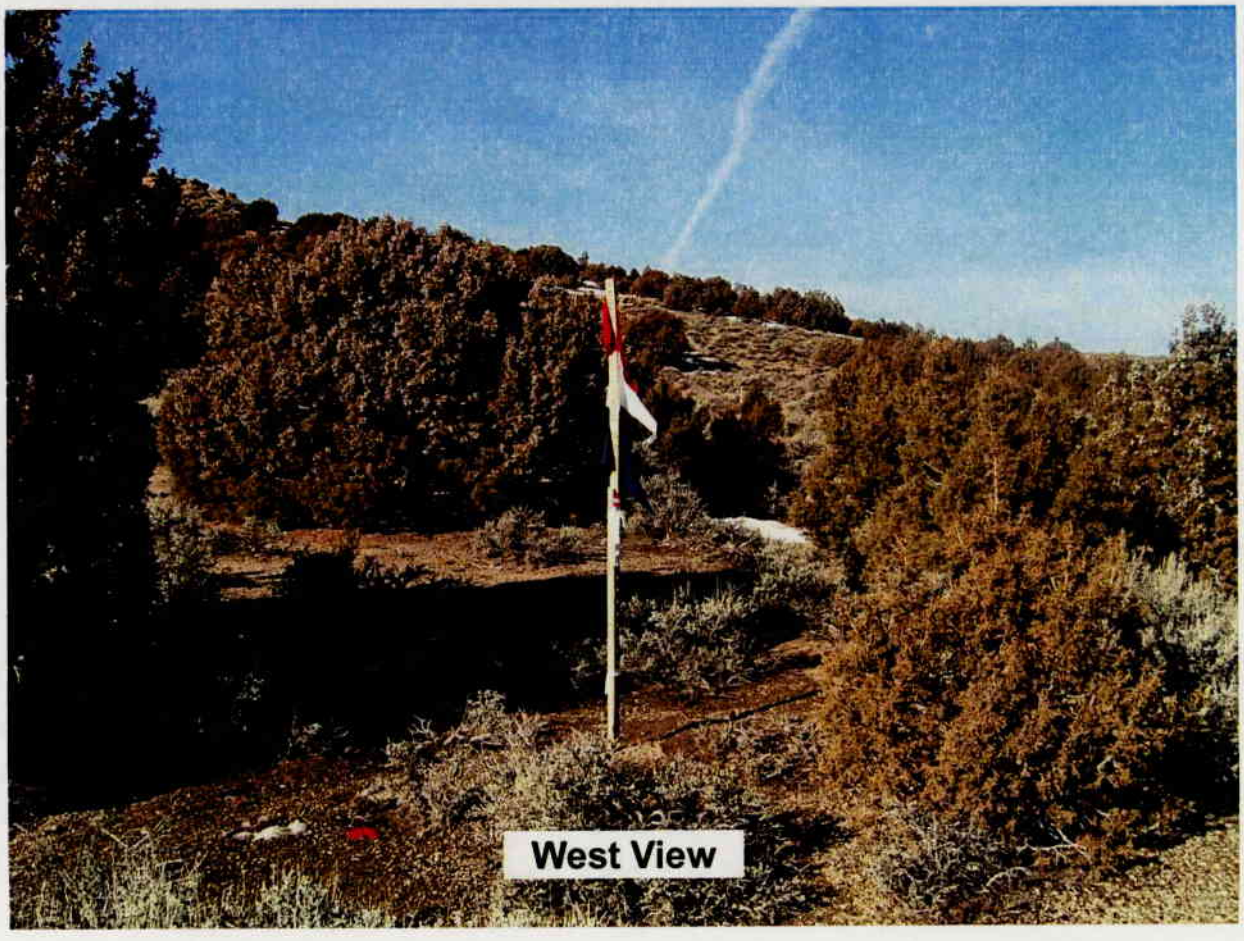

Access Looking
Northwest


Big Pack 12-21-22-2 Well Pad
North View


East View

Big Pack 12-21-22-2 Well Pad

South View



West View

003

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 03/18/2005

API NO. ASSIGNED: 43-047-36423

WELL NAME: BIG PACK 12-21-22-2
OPERATOR: ENDURING RESOURCES, LLC (N2750)
CONTACT: PHYLLIS SOBOTIK

PHONE NUMBER: 303-350-5114

PROPOSED LOCATION:
SENW 02 120S 210E
SURFACE: 1925 FNL 2097 FWL
BOTTOM: 1925 FNL 2097 FWL
UINTAH
UNDESIGNATED (2)

LEASE TYPE: 3 - State
LEASE NUMBER: ML 47084
SURFACE OWNER: 3 - State
PROPOSED FORMATION: MVRD
COALBED METHANE WELL? NO

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering	DKD	4/21/05
Geology		
Surface		

LATITUDE: 39.80460
LONGITUDE: -109.5360

RECEIVED AND/OR REVIEWED:

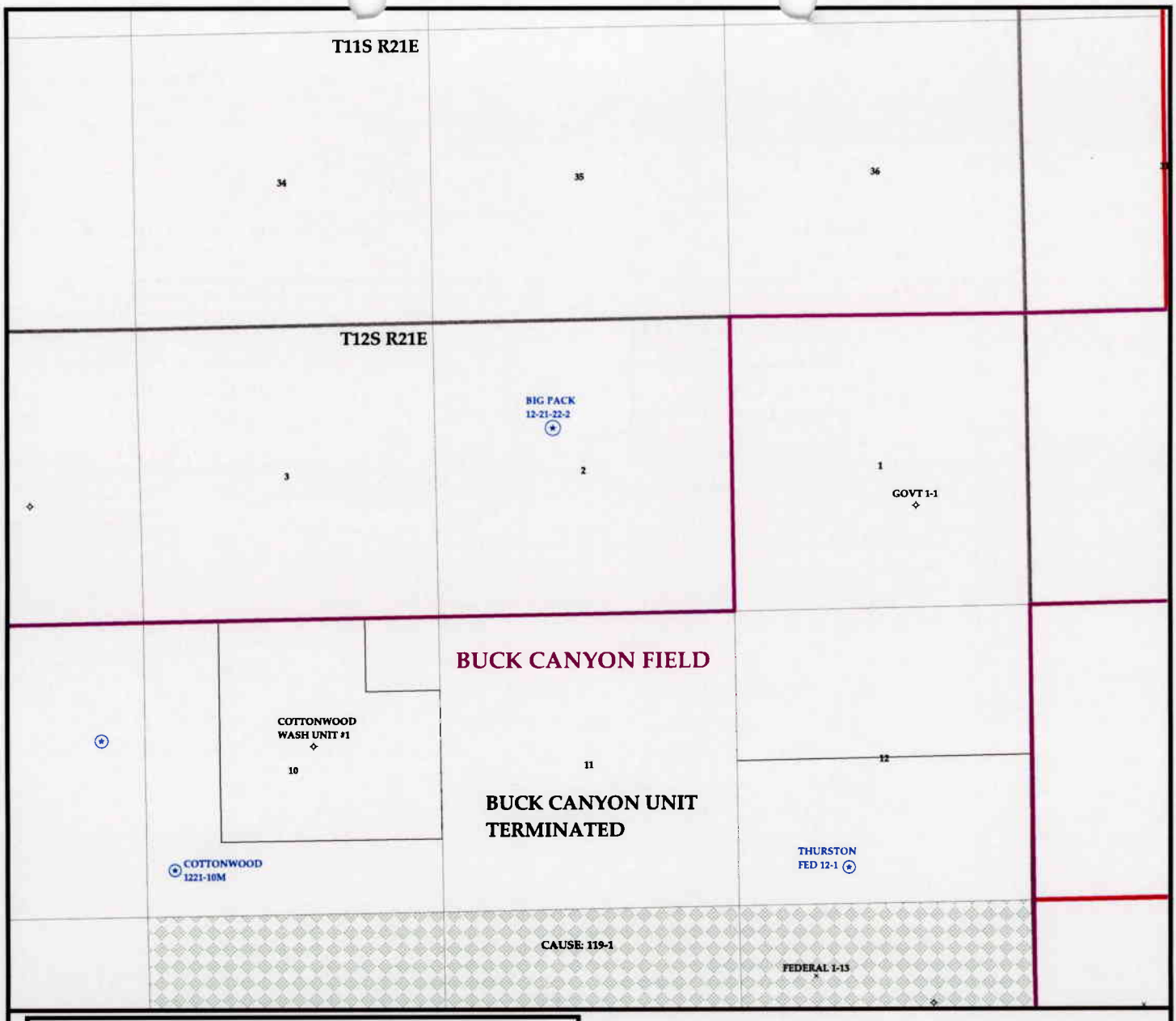
✓ Plat
✓ Bond: Fed[] Ind[] Sta[] Fee[]
(No. RLB0008031)
N Potash (Y/N)
N Oil Shale 190-5 (B) or 190-3 or 190-13
✓ Water Permit
(No. 43-2195)
N RDCC Review (Y/N)
(Date:)
NA Fee Surf Agreement (Y/N)

LOCATION AND SITING:

___ R649-2-3.
Unit ___
✓ R649-3-2. General
Siting: 460 From Qtr/Qtr & 920' Between Wells
___ R649-3-3. Exception
___ Drilling Unit
Board Cause No: ___
Eff Date: ___
Siting: ___
___ R649-3-11. Directional Drill

COMMENTS: Needs Presite (04-12-05)

STIPULATIONS: 1- Spacing Stip
2- STATEMENT OF BASIS
3- Surface Csg Cmt Stip



OPERATOR- ENDURING RES LLC (N2750)

SEC. 2 T.12S R.21E

FIELD: UNDESIGNATED (002)

COUNTY: UINTAH

SPACING: R649-3-2 / GENERAL SITING

Wells

- GAS INJECTION
- GAS STORAGE
- LOCATION ABANDONED
- NEW LOCATION
- PLUGGED & ABANDONED
- PRODUCING GAS
- PRODUCING OIL
- SHUT-IN GAS
- SHUT-IN OIL
- TEMP. ABANDONED
- TEST WELL
- WATER INJECTION
- WATER SUPPLY
- WATER DISPOSAL

Units.shp

- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PENDING
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

Fields.shp

- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED

Utah Oil Gas and Mining

N
W E
S

PREPARED BY: DIANA WHITNEY
DATE: 21-MARCH-2005

Enduring Resources

475 17th Street Suite 1500 Denver Colorado 80202
Telephone 303 573-1222 Fax 303 573 0461

March 28, 2005

Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
P. O. Box 145801
Salt Lake City, Utah 84114-5801

Attn.: Ms. Diana Whitney

RE: Southam Canyon #9-25-22-32
SENW Sec 32 T9S-R25E
Uintah County, Utah

Southam Canyon #10-25-21-32
NENW Sec 32 T10S-R25E
Uintah County, Utah

Agency Draw #12-21-31-36
NWNE Sec 36 T12S-R21E
Uintah County, Utah

Big Pack #12-21-22-2
SENW Sec 2 T12S-R21E
Uintah County, Utah

Dear Ms. Whitney:

Enclosed is an original Cultural Resource Inventory concerning each of the referenced wells. An original report was submitted to the State and Institutional Trust Lands Administration, to the Utah State Historical Preservation Office and to the Vernal BLM.

If any questions arise or additional information is required, please contact me at 303-350-5114.

Sincerely,

Phyllis Sobotik
Regulatory Specialist

RECEIVED
APR 0 1 2005
DIV. OF OIL, GAS & MINING

/ps
Enclosure:

CULTURAL RESOURCE INVENTORY OF ENDURING RESOURCES' SOUTHAM CANYON 9-25-22-32, SOUTHAM CANYON 10-25-21-32, AGENCY DRAW 12-21-31-36, AND BIG PACK 12-21-22-2 WELL LOCATIONS, UINTAH COUNTY, UTAH

Keith R. Montgomery
and
Shari Maria Silverman

CULTURAL RESOURCE INVENTORY OF ENDURING RESOURCES' SOUTHAM CANYON 9-25-22-32, SOUTHAM CANYON 10-25-21-32, AGENCY DRAW 12-21-31-36, AND BIG PACK 12-21-22-2 WELL LOCATIONS, IN UINTAH COUNTY, UTAH

Keith R. Montgomery
and
Shari Maria Silverman

Prepared For:

State of Utah
Trust Lands Administration
and
Bureau of Land Management
Vernal Field Office

Prepared Under Contract With:

Enduring Resources, LLC
475 17th Street, Suite 1500
Denver, Colorado 80202

Prepared By:

Montgomery Archaeological Consultants
P.O. Box 147
Moab, Utah 84532

MOAC Report No. 05-77

March 25, 2005

United States Department of Interior (FLPMA)
Permit No. 04-UT-60122

State of Utah Antiquities Project (Survey)
Permit No. U-05-MQ-0183s

ABSTRACT

A cultural resource inventory was conducted by Montgomery Archaeological Consultants (MOAC) in March 2005 for Enduring Resources' Southam Canyon 9-25-22-32, Southam Canyon 10-25-21-32, Agency Draw 12-21-31-36, and Big Pack 12-21-22-2 proposed well locations with access and pipeline corridors. The project area occurs in the Big Pack Mountain, Agency Draw, and Southam Canyon areas area, south of Vernal, Utah. The survey was implemented at the request of Ms. Phyllis Sobotik, Enduring Resources, LLC, Denver, Colorado. A total of 79.59 acres was inventoried for cultural resources with 53.04 acres on lands administered by the State of Utah School and Institutional Trust Lands Administration (SITLA) and 26.55 acres on public land administered by the Bureau of Land Management (BLM), Vernal Field Office.

The cultural resource inventory resulted in the documentation of one new archaeological site (42Un4743), a historic corral, and the revisitation of one previously recorded site (42Un2487), the Buck Canyon Road, which was re-recorded by MOAC in 2002, and recommended as not eligible to the NRHP. The corral (42Un4743) is also recommended as not eligible to the NRHP, because it is not known to be associated with significant events or persons, does not have a unique construction type, and would probably not contribute significant data to the region's historic record.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

INTRODUCTION

A cultural resource inventory was conducted by Montgomery Archaeological Consultants (MOAC) in March 2005 for Enduring Resources' Southam Canyon 9-25-22-32, Southam Canyon 10-25-21-32, Agency Draw 12-21-31-36, and Big Pack 12-21-22-2 proposed well locations with access and pipeline corridors. The project area occurs in the Big Pack Mountain, Agency Draw, and Southam Canyon areas area, south of Vernal, Utah. The survey was implemented at the request of Ms. Phyllis Sobotik, Enduring Resources, LLC, Denver, Colorado. A total of 79.59 acres was inventoried for cultural resources with 53.04 acres on lands administered by the State of Utah School and Institutional Trust Lands Administration (SITLA) and 26.55 acres on public land administered by the Bureau of Land Management (BLM), Vernal Field Office.

The objective of the inventory was to locate, document, and evaluate any cultural resources within the project area in order to comply with Section 106 of 36 CFR 800, the National Historic Preservation Act of 1966 (as amended). Also, the inventory was implemented to attain compliance with a number of federal and state mandates, including the National Environmental Policy Act of 1969, the Archaeological and Historic Conservation Act of 1972, the Archaeological Resources Protection Act of 1979, the American Indian Religious Freedom Act of 1978, and Utah State Antiquities Act of 1973 (amended 1990).

The fieldwork was performed on March 15 through 21, 2005 by Keith R. Montgomery, (Principal Investigator), assisted by Todd Seacat, Jennifer Taylor, and Mark Beeson, under the auspices of U.S.D.I. (FLPMA) Permit No. 04-UT-60122 and State of Utah Antiquities Permit (Survey) No. U-05-MQ-0183s issued to MOAC.

A file search was performed by Marty Thomas at the State Historic Preservation Office in Salt Lake City on March 11, 2005. This consultation indicated that several cultural resource inventories have been conducted near the project area.

In 1980, Woodward-Clyde Consultants completed a cultural resource inventory of a MAPCO pipeline project, which included a 115 mile section in northern Utah (Woodward-Clyde Consultants 1980, U-80-WG-0299b,f,n,p,s), revealing no sites near the project area.

In 1981, Nickens and Associates completed a cultural resource inventory for the Seep Ridge area using sample survey units (Larralde and Chandler 1981, U-81-NH-0590b). During this investigation, they found no archaeological sites near the current project area.

In 1997, Metcalf Archaeological Consultants, Inc. conducted a cultural resource inventory of approximately 12.5 miles of pipeline route in the Willow Creek vicinity, revealing a historic road (42Un2487), Buck Canyon Road (Graham 1997, U-97-MM-0663b). This intersects with the access road and pipeline to well location Agency Draw 12-21-31-36, but it will not be directly affected.

In 1998, An Independent Archaeologist conducted two cultural resource inventories for Questar Gas Management Company. One included the Buck Canyon Pipeline Lateral, which revealed four sites (Truesdale 1998a, U-98-AY-0044b,s,i). Only one site, the previously recorded Buck Canyon Road (42Un2487), is in the project's vicinity. The other survey was for an alternative route for the aforementioned pipeline, revealing the same sites as the previous inventory (Truesdale 1998b, U-98-AY-0256b,s,i).

In 2002, Montgomery Archaeological Consultants, Inc. completed a cultural resource inventory under contract with Buyes and Associates for the Veritas DGC Land, Inc. Uintah Seismic Project. Of the 75 archaeological sites found or revisited, three lie near well location Agency Draw 12-21-31-36 (Elkins and Montgomery 2002, U-02-MQ-0243b,p,s). One is Buck Canyon Road (42Un2487). The other two include a historic trash scatter (42Un3092), and a historic rock cairn (42Un3093). Neither of these sites are located in the project's immediate vicinity.

DESCRIPTION OF PROJECT AREA

The four proposed Enduring Resources' well locations, with access and pipeline corridors are situated south of Vernal, Utah, southeast and southwest of Bonanza, Utah, southeast of the Chapita Wells Gas Field, north of the Buck Canyon Gas Field, east of Willow Creek, and west of the White River. The legal description is Township 9 South, Range 25 E, Section 32, Township 10 South, Range 25 East, Section 32, and Township 12 South, Range 21 East, Sections 2, 3, 4, 10, 11 and 36 (Figures 1 through 4 and Table 1).

Table 1. Enduring Resources' Four Well Locations.

Well Location Designation	Legal Location	Access/Pipeline	Cultural Resources
Southam Canyon 9-25-22-32	T 9S, R 25E, S. 32 SE/NW	Pipeline and Access within 10-acre	None
Southam Canyon 10-25-21-32	T 10S, R 25E, S. 32 NE/NW	Pipeline and Access within 10-acre	None
Agency Draw 12-21-31-36	T 12S, R 21E, S. 36 NW/NE	Pipeline/ Access: 1272 ft	None
Big Pack 12-21-22-2	T 12S, R 21E, S. 2 SE/NW	Pipeline: 15,479 ft	42Un2487 42Un4743

Environment

The study area lies within the Uinta Basin physiographic unit, a distinctly bowl-shaped geologic structure (Stokes 1986:231). The Uinta Basin ecosystem is within the Green River drainage, considered to be the northernmost extension of the Colorado Plateau. The geology is comprised of Tertiary age deposits which include Paleocene age deposits, and Eocene age fluvial and lacustrine sedimentary rocks. The Uinta Formation, which is predominate in the project area, occurs as eroded outcrops formed by fluvial deposited, stream laid interbedded sandstone and mudstone, and is known for its prolific paleontological localities.

Specifically, the project area is situated on rocky ridges along the west side of the White River, which is characterized by flat topped buttes and narrow steep-sided ridges. The area is heavily dissected and carved by ephemeral drainages. Surface geology consists of hard pan residual soil armored with shale and sandstone pebbles. The elevation ranges between 5500 ft and 6200 ft a.s.l. The project occurs within the Upper Sonoran Desert Shrub Association which includes sagebrush, shadscale, greasewood, mat saltbush, snakeweed, rabbitbrush, prickly pear cactus, Indian ricegrass and other grasses. Modern disturbances include roads and oil/gas development.

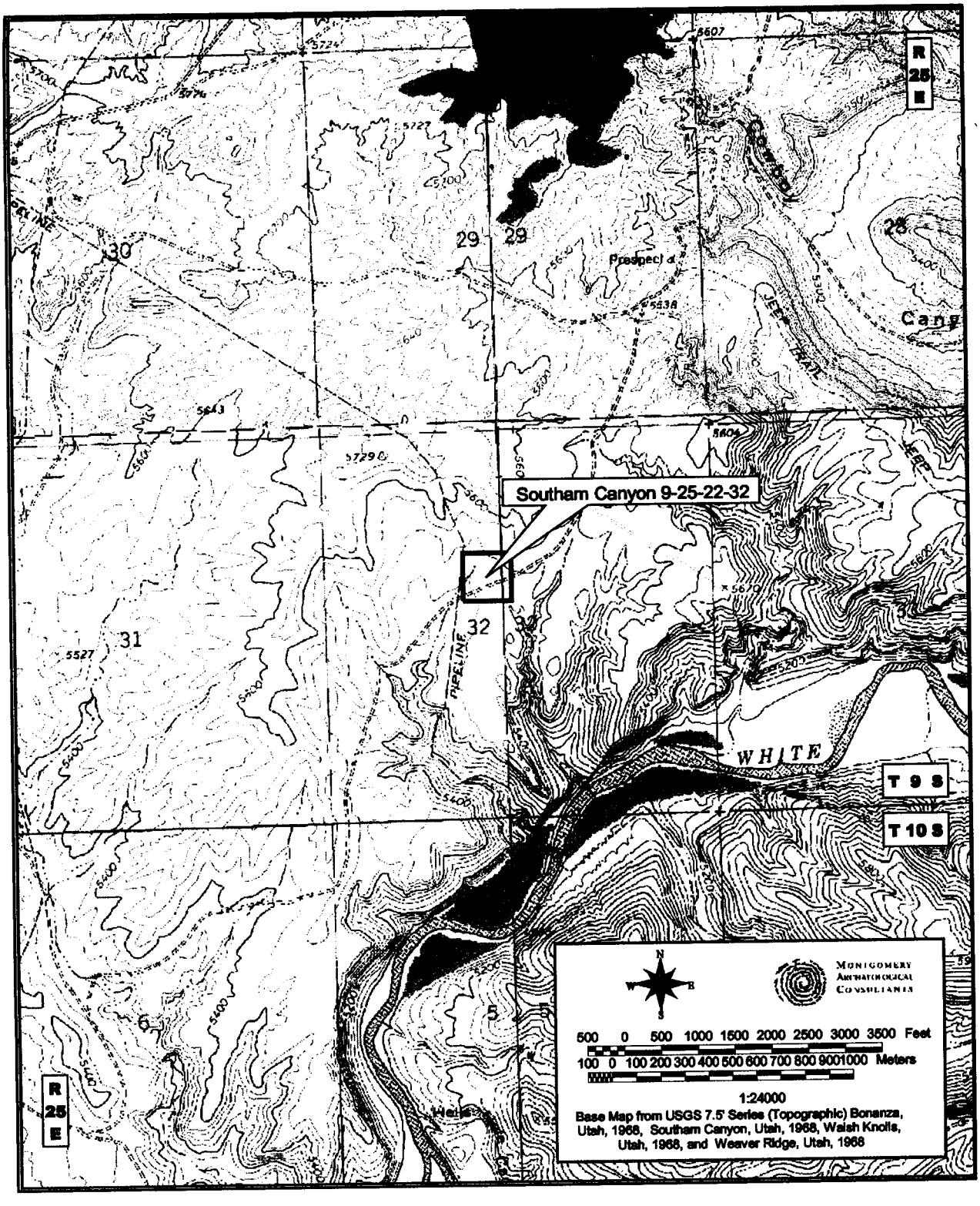


Figure 1. Inventory Area of Enduring Resources' Southam Canyon 9-25-22-32 Well Location, Uintah County, Utah.

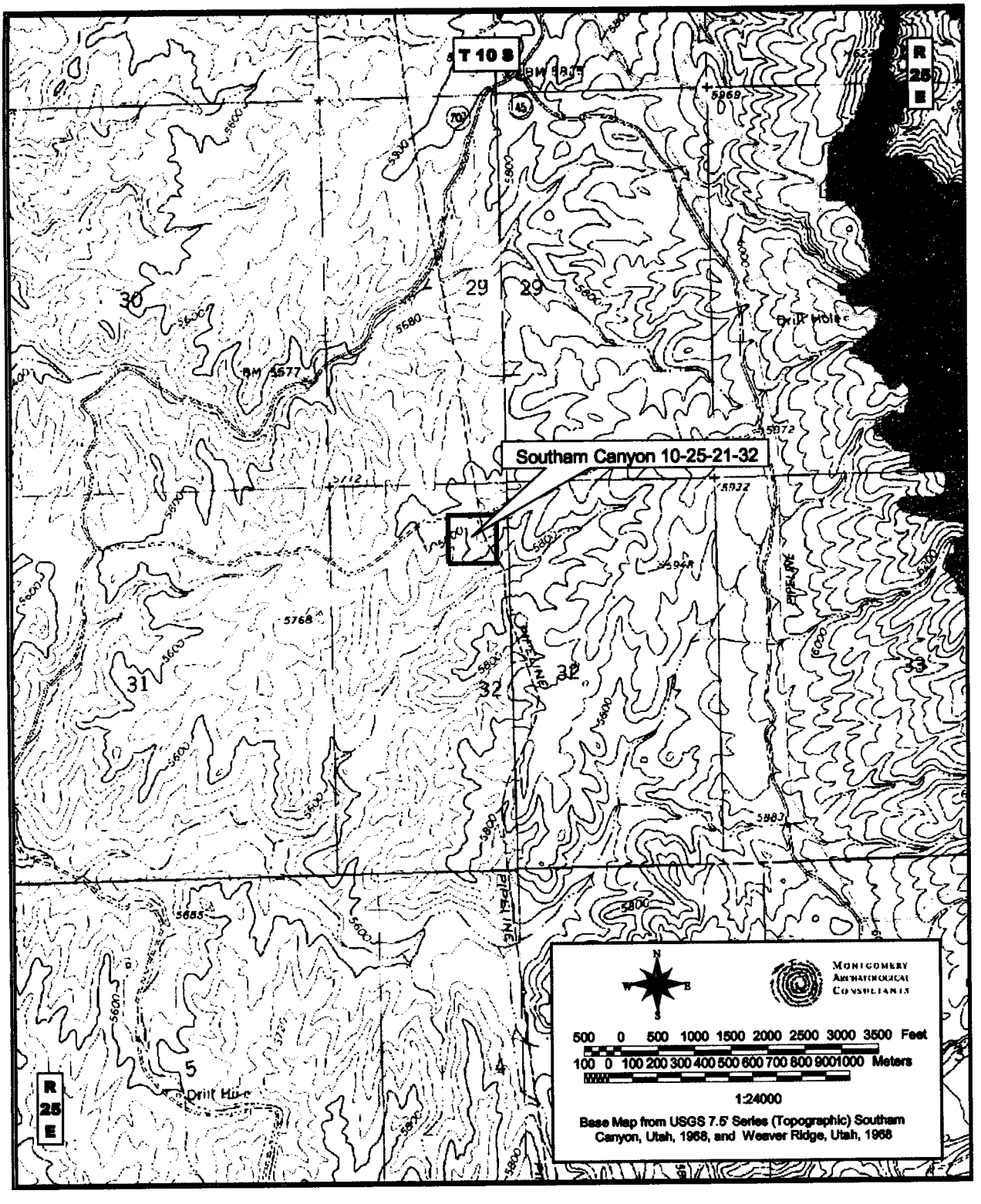


Figure 2. Inventory Area of Enduring Resources' Southam Canyon 10-25-21-32 Well Location, Uintah County, Utah.

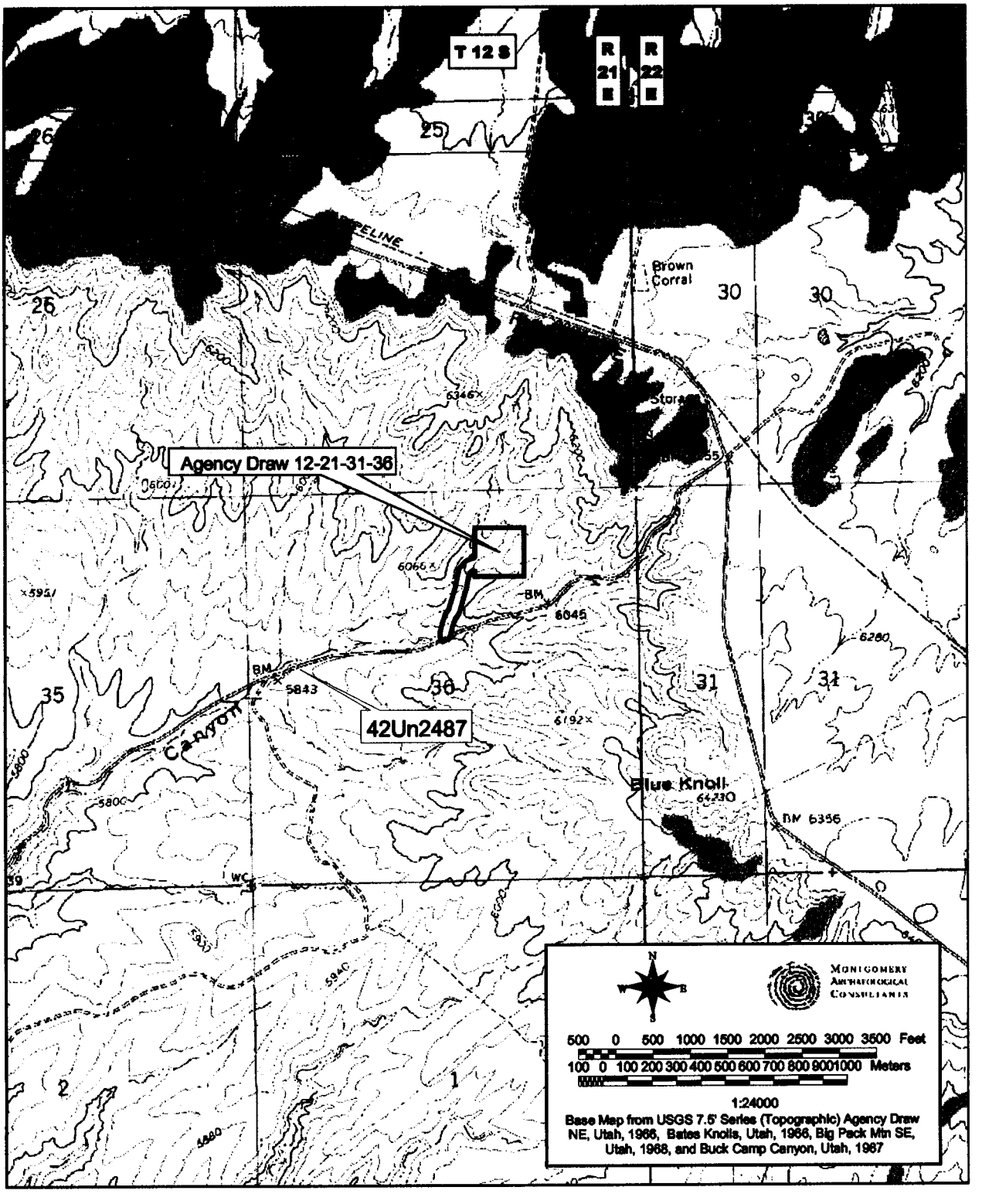


Figure 3. Inventory Area of Enduring Resources' Agency Draw 12-21-31-36 Well Location with Pipeline and Access, Uintah County, Utah.

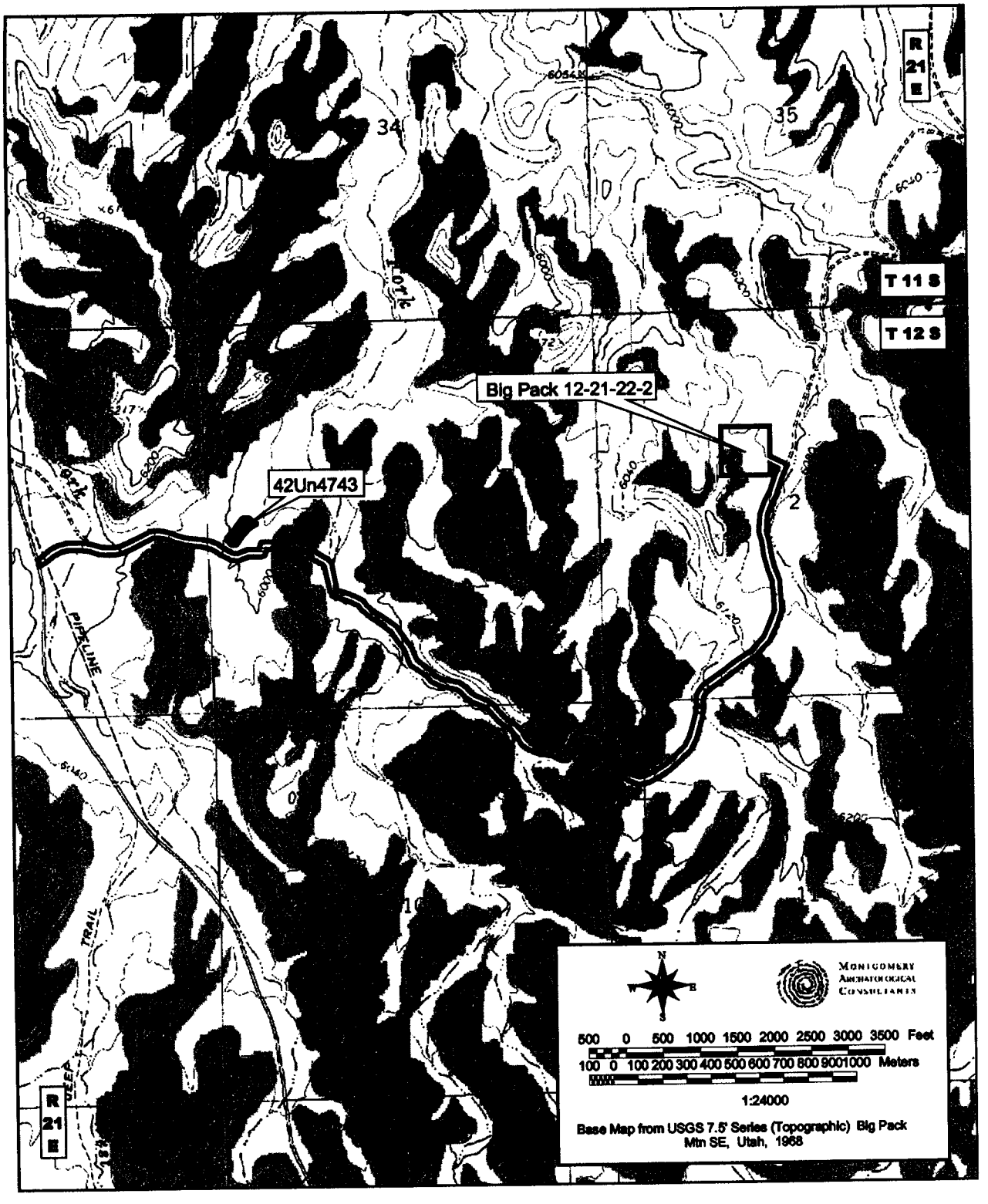


Figure 4. Inventory Area of Enduring Resources' Big Pack 12-21-22-2 Well Location with Pipeline and Cultural Resources, Uintah County, Utah.

Cultural-Historical Overview

The cultural-chronological sequence represented in the study area includes the Paleoindian, Archaic, Fremont, Protohistoric, and Euro-American stages. The earliest inhabitants of the region are representative of the Paleoindian stage (ca. 12,000-8,000 B.P.). This stage is characterized by the adaptation to terminal Pleistocene environments and characterized by the exploitation of big game fauna. The presence of Paleoindian hunters in the Uinta Basin region is implied by the discovery of Clovis and Folsom fluted points (ca. 12,000 B.P. - 10,000 B.P.), as well as the more recent Plano Complex lanceolate projectile points (ca. 10,000 B.P. - 7,000 B.P.). However, no such artifacts have been recovered in stratigraphic or chronometrically controlled contexts in northeastern Utah.

The Archaic stage (ca. 8,000 B.P. - 1,500 B.P.) is characterized by peoples depending on a foraging subsistence strategy, seasonally exploiting a wide spectrum of plant and animal species in different ecozones. The shift to an Archaic lifeway was marked by the appearance of new projectile point types perhaps reflecting the development of the atlatl in response to a need to pursue smaller and faster game (Holmer 1986). In northeastern Utah, evidence of widespread Early Archaic exploitation is relatively sparse compared to the subsequent Middle and Late Archaic periods. Early Archaic (ca. 6000 to 3000 B.C) sites in the basin include sand dune sites and rockshelters clustered mainly in the lower White River drainage as well as along the Green River in the Browns Park and Flaming Gorge area (Spangler 1995:373). Projectile points recovered from northeastern Utah include Pinto Series, Humboldt, Elko Series, Northern Side-notched, Hawken Side-notched, Sudden Side-notched and Rocker Base Side-notched points. The Middle Archaic period (ca. 3000 to 500 B.C.) is characterized by improved climatic conditions and increased human populations on the northern Colorado Plateau. Several stratified Middle Archaic sites have been excavated and dozens of sites have been documented in the study area. Middle Archaic sites in the area reflect cultural influences from the Plains, although a Great Basin and/or northern Colorado Plateau influence is represented in the continuation of the Elko Series projectile points. The Late Archaic period (ca. 500 B.C. to A.D. 550) in the area is distinguished by the continuation of Elko Series atlatl points with the addition of semi-subterranean residential structures at base camps. By about A.D. 100, maize horticulture and Rose Springs arrow points had been added to the Archaic lifeway. Rock art styles commonly attributed to Colorado Plateau Archaic peoples include the Barrier Canyon Style which has been ascribed a temporal span of ca. 1000 B.C. to A.D. 500 by Cole (1990:67).

The Formative stage (A.D. 500-1300) is defined by Spangler (1993, 1995) by the Tavaputs Plateau adaptation which includes Formative peoples of the Book Cliffs, East Tavaputs and West Tavaputs Plateau (primarily Nine Mile, Range Creek, Hill Creek and Willow Creek) which have been traditionally assigned to the San Rafael or Uinta variant by Marwitt (1970). According to Spangler (1995:499) although groups in both areas (e.g., Uinta Basin and Tavaputs Plateau) were semi-sedentary, manufactured pottery, and practiced maize horticulture, such traits such as architectural styles, storage strategies, settlement patterns, chronology, and rock art styles were significantly different. Differences between these two Fremont cultural adaptations are likely due to environmental differences between the two regions. The Tavaputs Plateau is dominated by deeply incised canyons while the Uinta Basin topography is characterized as relatively flat lowlands, sloping surfaces, and wide shallow valleys (Stokes 1986). In the Tavaputs Plateau area, habitation sites are usually confined along stream terraces and on outcrops in deeply striated canyons such as Hill Creek and Willow Creek (Spangler 1995:502). Compared to the Uinta Basin, the Fremont presence was apparently sparse prior to about A.D. 1000 as shown by a cluster of dates between A.D. 1000 and 1300 (Spangler 1999:63). Residential structures on the plateau are characterized

by abundant dry-laid masonry construction and settlement patterns featuring clusters of pithouses along stream terraces and surface masonry structures on rock outcrops, pinnacles and cliff ledges (Spangler 1995, 1999). On both sides of the Green River, the use of dry-laid masonry "towers" and walled "forts", (dating after A.D. 700), suggests a defensive behavioral mode involving both the protection of people and the protection of stored resources (Spangler 1999:61) In terms of material culture, in the Tavaputs Plateau area the ceramic assemblage is dominated by Emery Gray types made of basalts found to the south in the vicinity of the San Rafael Swell. Spangler (1999:59) remarks that in comparison to the Uinta Basin, where ceramics appear to have played a significant role in the Fremont lifeway, pottery sherds are extremely rare at Tavaputs Plateau sites.

Fremont style rock art includes well-made petroglyphs, rock paintings (monochrome and polychrome), and combination petroglyph-rock paintings that feature heroic and supernatural appearing anthropomorphs, often near life size. The rock art of Willow Creek falls within the geographic area for the Northern San Rafael Fremont Style, which according to Schaafsma (1971) shares stylistic similarities with the Barrier Canyon Style on the northern Colorado Plateau. Elements of the Northern San Rafael Style include scalps, masks, and heads; concentric circles, spirals, lines, and other geometric designs; quadrupeds such as bighorn sheep, pronghorn, deer or elk, bison, and canines; scorpion and centipede-like images and other possible insects; lizards; snakes; shieldlike images; owls, wading birds; footprints, paw prints, and ungulate tracks (Cole 1990; Schaafsma 1971).

Archaeological evidence suggests that Numic peoples appeared in east-central Utah at approximately A.D. 1100 or shortly before the disappearance of Formative-stage peoples (Reed 1994). Numic or Numic-speakers may have coexisted with sedentary Fremont populations. The demise of the Fremont may have been nothing more than a shift in subsistence strategies from primarily horticulture to exclusively hunting/gathering (Simms 1979) rather than an actual arrival of new people. The archaeological remains of Numic-speaking Utes consist primarily of lithic scatters with low quantities of brown ware ceramics, rock art, and occasional wickiups. The brown ware ceramics appear to be the most reliable indicator of cultural affiliation, as Desert Side-notched and Cottonwood Triangular points were manufactured by other cultural groups beside the Ute (Horn, Reed, and Chandler 1994:130). The Protohistoric Utes are the decedents of these (Numic-speaking) hunter and gatherers whom exploited various fauna and flora resources. The cultural history of the Eastern Ute, comprising the bands living east of the Green River, has been divided into four phases (Reed 1988). The earliest and most tenuous phase is the Chipeta Phase, dated between ca. 1250 and 1400. Diagnostic artifacts include Desert Side-notched, Cottonwood Triangular, and small corner-notched arrow points and possibly Shoshonean knives. The Canalla phase (ca. A.D. 1400-1650) designates the period between the appearance of well-dated Uncompahgre brown ware ceramics and the adoption of an equestrian lifeway. Diagnostic artifacts include Uncompahgre Brown Ware ceramics, Desert Side-notched and Cottonwood Triangular points, and Shoshonean knives. The pedestrian hunter and gatherers probably lived in wickiups. Near the end of the phase, some groups may have obtained trade items from Spanish settlements in New Mexico (Horn, Reed, and Chandler 1994:131). The Antero phase (ca. A.D. 1650-1881) represents a shift to a fully equestrian lifestyle and integration of Euroamerican trade goods into Ute material culture. The horse permitted hunting of bison on the Plains and led to an increase in the importance of raiding for economic gain (ibid:131). Euroamerican trade goods became important, and tepees as well as wickiups were inhabited. A number of Protohistoric (Numic) sites have been documented to the east in the Seep Ridge Study Tract identified mainly by Desert Side-notched points (Larralde and Chandler 1981). Most of these sites are short-term camps or limited activity areas situated on ridges and within sand dunes (Ibid: 137-138).

The early Utes in Uintah County were Uinta-ats, a small band of a few hundred members (Burton 1996:20). In pre-horse days, Ute family groups lived largely independently of others with key gathering, hunting, and fishing sites being communal and granted to all, within both the local and extralocal Ute communities. Pronounced changes in Ute lifestyle began when southern and eastern Ute bands acquired the horse from Europeans, who began invading the Ute lands about 1550 (Duncan 2000:178). By 1776, Utes in Colorado had a highly developed tradition of horse use (Horn, Chandler and Reed 1994:141). Only those Utes in Utah who lived in areas with sufficient feed (i.e., the Uinta Basin, Wasatch Piedmont, and along the lower Sevier River) used the horse for transportation, whereas other Utes used horses for food (Ibid 141). According to Smith's (1974) informants both deer and buffalo were important game for the White River Ute band. Before the buffalo became extinct in the Uinta Basin in the 1830s, the Ute would make trips northeast of Fort Bridger in the vicinity of what is now Rock Springs and Green River, Wyoming using the horse to surround and drive the buffalo over a precipice (Callaway, Janetski, and Stewart 1986). Small mammals, rodents, fish, birds and insects were also procured, although this subsistence strategy was more evident among the Uintah Utes than among the Yampa or Uncompahgre Utes (Spangler 1995:742). All Ute groups made tripod or conical houses with a three or four-pole foundation and a circular ground plan some 10-15 feet in diameter with covering brush or bark and cooking or heating fires in shallow pits both inside and outside of the huts (Smith 1974). The utilization of these structures apparently continued even after the introduction of the tipi (Spangler 1995:745). Most Ute bands employed the sweat lodge usually made of willows struck in the ground in a circular pattern and tied at the top to create a dome-shaped structure (Smith 1974:43). Sweat lodges were 8 to 10 feet in diameter and 4 to 5 feet in height. The top was covered with a buffalo robe, tipi cover or willow brush with rabbit-skin blanket over the top. Stones were heated outside the structure and brought into a central hearth three or four stones at a time with water applied to the stones, creating steam (Spangler 1995:747). Three types of storage facilities were used by Ute groups in the area. One involved the construction of pits in cliff overhangs or shelters with rawhide or woven sagebrush bark bags containing food items stashed within them (Ibid 1995:746). The storage pit was then covered with soil and a fire was constructed over the top to destroy evidence that the pit had been excavated (Smith 1974:67). A second strategy involved the construction of platforms made of sticks of coniferous trees with foliage thick enough to protect the cache from inclement weather (Spangler 1995:746). When the sacks had been placed on the platform they were usually covered with cedar bark, so that the rain would drain off (Smith 1974:67). A third strategy involved storage platforms about 5 feet high placed outside the brush shelters and tipis (Spangler 1995:746). These platforms, erected on poles, were either slightly sloping or flat and hollowed out with the platforms made of bound together sagebrush.

On May 5, 1864, Congress passed a law confirming the 1861 executive order setting up the Uintah Reservation (Burton 1996:24). This treaty provided that the Ute people give up their land in central Utah and move within one year to the Uintah Reservation without compensation for loss of land and independence. The Uinta-ats (later called Tavaputs), PahVant, Tumpanawach, and some Cumumba and Sheberetch of Utah were gathered together at the Uintah agency during the late 1860s and early 1870s to form the Uintah Band (Burton 1996:18-19). In the 1880 treaty council the White River Utes, who had participated in the Meeker Massacre, were forced to sell all their land in Colorado and were moved under armed escort to live on the Uintah Reservation (Callaway, Janetski, and Stewart 1986:339). The Uncompahgre Utes are named after the agency established for them in 1875 in the Uncompahgre River Valley in Colorado. Around 1880, 361 Uncompahgre Utes were forced to sell their lands, and relocated to the Ouray Reservation adjacent to the southern boundary of the Uintah Reservation. A separate Indian Agency was established in 1881 with headquarters at Ouray, erected across the river from where the first military post, Fort

Thornburgh was located. On January 5, 1882, President Chester A. Arthur issued an executive order creating the Uncompahgre Indian Reservation. The boundaries extended south of the Uintah Reservation a distance 45 miles. Most of the land within the reservation was arid and desolate, containing little water or arable land that would make the region attractive to white homesteaders.

The General Allotment Act (Dawes Severalty Act of 1887), provided for the allotment of tribal lands to individual tribe members in which to raise crops on 40, 80 or 160 acre parcels. All lands not allotted under severalty was to be declared public domain and opened to ranchers, homesteaders, and mineral speculators. Encouraging Native Americans to purchase (at $1.25 an acre) individual allotments within the reservations eventually created a checkerboard of private and reservation land. The leaders of the Uncompahgre, White River, and Uintah Utes opposed allotment and in 1895 a commission was appointed to survey and allot the Uncompahgre lands (Duncan 2000:203). There was not enough arable land to provide suitable allotments of all Uncompahgre, so it was decided to take the needed additional lands from the Uintah and White River Utes. In 1897 Congress passed an act requiring allotments to be made on the Uncompahgre Reservation (Ibid 203). The allotment commission began issuing parcels to Uncompahgre Utes in 1895, although the process was delayed by the Utes' refusal to pay the $1.25 per acre allotment fee and their reluctance to accept land in areas without water or sufficient forage for livestock (Spangler 1995:734). The only lands suitable for cultivation were along the Green and White Rivers, and along Evacuation, Bitter, Willow and Hill Creeks.

The earliest recorded visit by Europeans to Utah was the Dominguez-Escalante expedition, of 1776. From the early 1820s to 1845, the Uinta Basin became an important part of the expanding western fur trade. Homesteading began in 1878 with Thomas Smart, one of the first white settlers to settle east of Ouray. In 1879, about forty cowboys and several large herds of cattle wintered on the White River. The winter of 1879-1880 saw the establishment of a settlement near the White River by several pioneers and their families including Ephraim Ellsworth, the Remingtons, and the Campbells. The person most responsible for organizing a permanent homesteading movement in Ouray Valley was William H. Smart, the brother of Thomas Smart, who became president of the Wasatch LDS Stake in 1901 (Burton 1998). When the Ute reservation was opened to white homesteaders in 1905, Smart organized several exploration trips into the area that later attracted many LDS families.

Initially, livestock was the main industry of white homesteaders in Uintah County. Two factors - free grass and the availability of water - influenced men to move their cattle into the county. Most of the land in the area was part of the public domain and no territory or state could tax it. Cattle were eventually brought up east as far as the Green River and then to the surrounding mountains. Large cattle herds had been coming to Brown's Park from Texas and other eastern areas since the early 1850s. The K Ranch was a large cattle operation owned by P.R. Keiser which brought many cowboys to the area. The ranch was located on the Utah-Colorado line with property in both states. Charley Hill, who came to Ashley Valley as a trapper for the Hudson Bay Company, started a cattle company on Hill Creek and Willow Creek in the Book Cliffs (Burton 1996:109). They later moved out when the government set this section aside for the Ouray Indian Agency. Other prominent men in the cattle industry included A.C. Hatch, Dan Mosby, and James McKee. Cattle rustling became an increasingly large problem as cattle herds grew, and conflict resulted between the small and large cattle companies. In 1912, the Uintah Cattle and Horse Growers Association was organized to protect the livestock industry from thieves and to issue an authorized brand book (Ibid: 110).

In 1937, the Bureau of Indian Affairs purchased all of the ranches along Hill Creek in the Book Cliffs for the Ute Tribes. Several ranchers such as Abe and Golden Hatch owned small homestead ranches on Willow Creek and the surrounding areas that operated for a few more years.

Golden finally sold out to his son, Shorty Hatch, and Clive Sprouse (Burton 1998:514). One newly documented site for this project, 42Un3129, is named on USGS maps as "Hatch's Camp" and is probably related to this family of ranchers.

The sheep industry later became part of Uintah County's economic backbone, and contributed to the decline of the cattle industry. Sheep were first introduced to the valley during the winter of 1879 when Robert Bodily brought in sixty head (Burton 1996:111). Sheep were able to survive the hard winters much better than cattle. By the mid-1890s, more than 50,000 head of sheep were in the region; and the production of wool became very important. In 1897, C.S. Carter began building shearing corrals. In 1899, 500,000 pounds of wool were shipped from the county and sold for twelve and one-half cents per pound (Ibid:111). In 1906, the Uintah Railway Company built shearing pens on the Green River to encourage the shipping of wool by train; and in 1912, pens were built at Bonanza and Dragon. Beginning in the 1940's Mexican sheep-shearing crews and Greek sheepmen from the Price and Helper areas came into the area. The Taylor Grazing Act was passed in 1934, allotting specific areas or "districts" to stockmen for livestock grazing that required permits. This act was a forerunner of the Bureau of Land Management, which was established in 1946 and eventually assumed responsibility for the administration of grazing laws on public land (Burton 1996:115).

Uintah County is also known for its natural resources. Coal, copper, iron, asphalt, shale, and especially gilsonite, were important to the mining industry. When gilsonite was discovered in the Uinta Basin in the 1880s, Congress was persuaded to apportion 7,040 acres from the Ute reservation so the mineral could be mined. This area became known as "The Strip" and later developed into the townsite of Moffat (later renamed Gusher). Gilsonite is a light-weight lustrous black hydrocarbon mineral that can easily be crushed into a black-brown powder. It can be found in commercial quantities only in the Uinta Basin. The earliest use of the mineral was in buggy paints and beer-vat linings. Today it is used in over a hundred products ranging from printing inks to explosives and automobile body sealer and radiator paint (Burton1998:343). Mining camps also sprang up near the Colorado line in Bonanza, Dragon, and Watson starting in about 1903. Many immigrants, including Greeks and Chinese, worked in the mines. Bonanza became one of the largest and most modern functioning mining camps in the area beginning in 1921 and reaching its peak in 1937. It was chosen as the Barber gilsonite company headquarters, because it was near the largest deposits of gilsonite in the area. Miners from Dragon, Rainbow, and other neighboring communities were relocated to Bonanza.

Specific to the project area, Watson Thompson homesteaded lands in Sections 1, 6, and 7 of Township 12 South, Range 21 East on September 13, 1930 under the May 20, 1862 Homestead Entry Act (12 Stat. 392) (General Land Office Accession No. 1040635). This area surrounds the Big Pack 12-21-22-2 well location and associated pipeline. The historic corral (42Un4743) is in this region.

SURVEY METHODOLOGY

An intensive pedestrian survey was performed for this project which is considered 100% coverage. At each of the proposed well locations, a ten acre area centered on the center stake of the location was surveyed by the archaeologist walking parallel transects spaced no more than 10 m (30 ft) apart. The access and pipeline corridors were 100 ft wide, surveyed by walking parallel transects along the staked centerline, spaced no more than 10 m (30 ft) apart. A wider corridor (150 ft) was inspected when access/pipeline routes shared a corridor. Ground visibility was considered to be good. A total of 79.59 acres was inventoried for cultural resources with 53.04 acres on lands administered by the State of Utah School and Institutional Trust Lands Administration (SITLA) and 26.55 acres on public land administered by the Bureau of Land Management (BLM), Vernal Field Office.

Cultural resources were recorded as either an archaeological site or isolated find of artifact. Archaeological sites were defined as spatially definable areas with features and/or ten or more artifacts. Sites were documented by the archaeologists walking transects across the site, spaced no more than 3 meters apart, and marking the locations of cultural materials with pinflags. This procedure allowed clear definition of site boundaries and artifact concentrations. Archaeological sites were plotted on a 7.5' USGS quadrangle, and photographed with site data entered on an Intermountain Antiquities Computer System (IMACS, 1990 version) inventory form (Appendix A).

INVENTORY RESULTS

The inventory of the four proposed Enduring Resources' well locations, with access and pipeline corridors, resulted in the documentation of one new archaeological site (42Un4743), a historic corral, and the revisitation of one previously recorded site (42Un2487), the Buck Canyon Road.

Table 2. Archaeological Sites, Legal Descriptions, and NRHP Eligiblity

Smithsonian Site Number	Temporary Site Number	Legal Description	Site Type	Eligibility
42Un2487 (Previously Recorded)	N/A	T 13S, R 21E; T 12S, R 21E	Historic Buck Canyon Road	Not Eligible
42Un4743	05-77-01	T 12S, R 21E	Historic Corral	Not Eligible

Archaeological Sites

Smithsonian Site No.: 42Un2487
Temporary Site No.: N/A
Proposed Well Location No.: Big Pack 12-21-22-2
Legal Description: Sections 2 and 3, T 13S, R 21E; Sections 35 and 36, T 12S, R 21E; and Sections 30 and 31, T 12S, 21E
NRHP Evaluation: Not Eligible
Description: This is a previously recorded segment of the historic Buck Canyon Road. It was originally documented in 1997 by Metcalf Archaeological Consultants during an inventory of the Double Triangle Pipeline (Graham 1997), and re-recorded by MOAC in 2002 (Elkins and Montgomery 2002). It consists of a 3.3 mile-long road segment which runs northeast-southwest between the Willow Creek Road and the Seep Ridge Road through Buck Canyon. No associated features, buildings, or artifacts were observed. It was recommended as not eligible to the NRHP because the current level of road maintenance has obliterated the original narrow track that must have existed, and no historic buildings or features were observed that could elevate the site's importance by association. No form for this site is included in this report.

Smithsonian Site No.: 42Un4743
Temporary Site No.: 05-77-01
Proposed Well Location No.: Big Pack 12-21-22-2
Legal Description: SW/SW/NW of Section 3, T 12 S, R 21 E
NRHP Evaluation: Not Eligible
Description: This is a historic corral with two hearths and a medium-density artifact scatter. The artifacts consist of tin containers, a tin sheet, tire fragments, and 20 fragments of a clear beverage bottle. The tin containers include a hole-in-top milk can (1935-1945), three sanitary food cans, one sanitary beverage can, a coffee can, and a lard pail. The juniper post and pine pole corral contains two separate components with eight gates.. It measures 105 m (344 ft) NE-SW by 42 m (138 ft) NW-SE. Its upright posts stand in pairs, averaging 1.4 m (4 ft, 6 in) tall above ground surface and 0.15 m (6 in) in diameter. Each pair is spaced 4.3 m (14 ft) apart. Five to six horizontal pine logs connect each pair of upright juniper posts. Their diameters range between 0.15 m (6 in) and 0.2 m (8 in). Their lengths are generally 4.9 m (16 ft), with ends overlapping those from adjacent segments. Log ends are both saw-cut and axe-hewn. The corral contains two components, a southern one (Corral A) and a northern one (Corral B). The southern component (Corral A) is square-shaped and divided into two pens with a head gate (Gate 7), another gate (Gate 1) in the west pen and a third one (Gate 2) to the east pen. The west pen measures 42 m (138 ft) NW-SE by 20 m (66 ft) NE-SW. The east pen measures 42 m (138 ft) NW-SE by 21 m (69 ft) NE-SW. Its northern component (Corral B) is triangular shaped with two pens and one chute. The northernmost pen is trapezoidal shaped and measures 30 m (98 ft) NE-SW by 23 m (75 ft) on its southwest side and 48 m (157 ft) on its northeast side. It has a gate (Gate 5) in its northern corner. Two others (Gates 4 and 6) enter the other section and the chute, respectively. The southern pen is triangular shaped, measuring 28 m (91 ft) NE-SW by 33 m (108 ft) NW-SE. The chute measures 29 m (95 ft) NE-SW by 2 m (7 ft) NW-SE. The chute has an additional gate (Gate 8) on its southern side.

Both features are on the northeast portion of the site. Feature A, a hearth, measures 1.5 m (5 ft) by 0.6 m (2 ft). It consists of two oxidized sandstone rocks, each measuring 0.6 m (2 ft) long by 0.5 m (1ft 6 in) high. Smoke stains the sides of the rocks, which face the other stone. The stones are spaced 0.3 m (1 ft) apart. Greasewood and sagebrush grow within the space. No soil staining or charcoal appear within or near the feature. It is located on the east side of the dirt road, 35 m, 70° from the corral's northeast corner. Feature B, another hearth, measures approximately 1 m (3 ft, 3 in) in diameter and has a slightly oval shape. It consists of sandstone cobbles. Charcoal flecks appear in the soil within the ring. It is located 52 m, 36° from the site datum.

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

The National Register Criteria for Evaluation of Significance and procedures for nominating cultural resources to the National Register of Historic Places (NRHP) are outlined in 36 CFR 60.4 as follows:

> The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of State and local importance that possess integrity of location, design, setting, material, workmanship, feeling, and association, and that they:
>
> a)...are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> b)...are associated with the lives of persons significant to our past; or
>
> c)...embody the distinctive characteristics of a type, period, or method of construction; or that represents the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> d)...have yielded or may be likely to yield information important in prehistory or history.

The cultural resource inventory resulted in the documentation of one new archaeological site (42Un4743), a historic corral, and the location of a previously recorded site (42Un2487), the Buck Canyon Road. The road was re-recorded by MOAC in 2002, and recommended as not eligible to the NRHP. The corral (42Un4743) is also recommended as not eligible to the NRHP, because it is not known to be associated with significant events or persons, does not have a unique construction type, and would probably not contribute significant data to the region's historic record.

MANAGEMENT RECOMMENDATIONS

The cultural resource inventory of the four proposed Enduring Resources' well locations, with access and pipeline corridors, resulted in the documentation of one new archaeological site (42Un4743), a historic corral, and the location of one previously recorded site (42Un2487), the Buck Canyon Road. Both of these sites are recommended as not eligible to the NRHP. Based on the findings, a determination of "no historic properties affected" is recommended for the undertaking pursuant to Section 106, CFR 800.

REFERENCES CITED

Burton, D.K.
1996 *A History of Uintah County: Scratching the Surface*. Utah Centennial County History Series. Utah State Historical Society and Uintah County Commission, Salt Lake City, Utah.

1998 *Settlements of Uintah County, Digging Deeper.* Uintah County Library History Series. Uintah County Library, Vernal, Utah.

Callaway, D., J. Janetski, and O.C. Stewart
1986 Ute. In *Great Basin*, edited by Warren L. D'Azevedo, pp. 336-367. Handbook of North American Indians, Volume II: Great Basin, edited by William C. Sturtevant, Smithsonian Institution, Washington.

Cole, S.J.
1990 Legacy on Stone: Rock Art of the Colorado Plateau and Four Corners Region. Johnson Books, Boulder.

Duncan, C.
2000 The Northern Utes of Utah. In *A History of Utah's American Indians*, edited by Forrest S. Cuch, pp. 167-224. Utah State Division of Indian Affairs/Utah State Division of History, Salt Lake City.

Elkins and Montgomery
2002 Cultural Resource Inventory of Seven Seismic Lines for the Veritas Uintah Seismic Project, Uintah County, Utah. Montgomery Archaeological Consultants, Inc., Moab, Utah. Report No. U-02-MQ-0243b,p,s.

Graham, C.
1997 Double Triangle Pipeline Cultural Resource Inventory, Uintah County, Utah. Metcalf Archaeological Consultants, Eagle, Colorado. Report No. U-97-MM-0183b).

Holmer, R.
1986 Projectile Points of the Intermountain West. In *Anthropology of the Desert West: Essays in Honor of Jesse D. Jennings*, edited by Carol J. Condie and Don D. Fowler, pp. 89-116. *University of Utah Anthropological Papers* No. 110. Salt Lake City.

Horn, J.C., A. D. Reed, and S. M. Chandler
1994 Grand Resource Area Class I Cultural Resource Inventory. Alpine Archaeological Consultants, Inc. Montrose. Bureau of Land Management, Moab, Utah.

Larralde, S. L. and S. M. Chandler
1981 Archaeological Inventory in the Seep Ridge Cultural Study Tract, Uintah County, Northeastern Utah with a Regional Predictive Model for Site Location. Nickens and Associates, Montrose, Colorado. Report No. U-81-NH-0590b.

Marwitt, J.P.
1970 Median Village and Fremont Culture Regional Variation. *University of Utah Anthropological Papers* No. 95. Salt Lake City.

Reed, A.D.
1988 Ute Cultural Chronology. In Archaeology of the Eastern Ute: A Symposium edited by Paul R. Nickens, pp 79-101. Colorado Council of Professional Archaeologists Occasional Papers No. 1. Denver.

1994 The Numic Occupation of Western Colorado and Eastern Utah during the Prehistoric and Protohistoric Periods. In *Across the West: Human Population Movement and the Expansion of the Numa*, edited by D.B. Madsen and D. Rhode. University of Utah Press.

Schaafsma, P.
1971 *The Rock Art of Utah: from the Donald Scott Collection*. Papers of the Peabody Museum No. 65. Harvard University, Cambridge, Mass.

Smith, A.M.
1974 *Ethnography of the Northern Utes*. Papers in Anthropology No. 17. Museum of New Mexico Press.

Spangler, J.D.
1993 Site Distribution and Settlement Patterns in Lower Nine Mile Canyon: The Brigham Young University Surveys of 1989-91. Master's thesis, Brigham Young University, Provo, Utah.

1995 Paradigms and Perspectives: A Class I Overview of Cultural Resources in the Uinta Basin and Tavaputs Plateau.

1999 Radiocarbon Dates, Acquired Wisdom, and the Search for Temporal Order in the Uintah Basin. In *Intermountain Archaeology*, edited by David B. Madsen and Michael D. Metcalf, pp. 48-69. University of Utah Anthropological Papers, No. 122.

Stokes, W.L.
1986 *Geology of Utah*. Utah Museum of Natural History and Utah Geological and Mineral Survey, Salt Lake City.

Truesdale, J. A.
1998a Cultural Resource Inventory for Questar Gas Management Co. Proposed Buck Canyon Pipeline Lateral, Uintah County, Utah. An Independent Archaeologist, Laramie, Wyoming. Report No. U-98-AY-0044b,s,i.

1998b Cultural Resource Inventory for Questar Gas Management Co. Proposed Sunday School Canyon Alternate for the Eastern Portion the Buck Canyon Pipeline Lateral, Uintah County, Utah. An Independent Archaeologist, Laramie, Wyoming. Report No. U-98-AY-0256b,s,i.

Woodward-Clyde Consultants
1980 Cultural Resource Inventory MAPCO's Rocky Mountain Liquid Hydrocarbons Pipeline, Utah. Woodward-Clyde Consultants, San Francisco, California. Report No. U-80-WG-0299b,f,n,p,s.

APPENDIX A

SITES
INTERMOUNTAIN ANTIQUITIES COMPUTER SYSTEM (IMACS) SITE FORM
(42Un4743)

On File At:

Utah Division of State History
Salt Lake City, Utah

DIVISION OF OIL, GAS AND MINING
APPLICATION FOR PERMIT TO DRILL
STATEMENT OF BASIS

OPERATOR: Enduring Resources, LLC
WELL NAME & NUMBER: Big Pack 12-21-22-2
API NUMBER: 43-047-36424
LOCATION: 1/4,1/4 SENW Sec:2 TWP: 12S RNG: 21E 1925 FNL 2097 FWL

Geology/Ground Water:

Enduring Resources proposes to set 2,000 feet of surface casing cemented to the surface. The base of the moderately saline water is estimated at 3,700 feet. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the proposed location. The surface formation at this location is the Uinta Formation. The Uinta Formation is made up of discontinuous sands interbedded with shales and are not expected to produce prolific aquifers. The proposed surface casing should adequately protect any potentially useable aquifers.

Reviewer: Brad Hill **Date:** 04-14-05

Surface:

On-site conducted April 12, 2005. In attendance: Bart Kettle (DOGM), Mike (Dirt Contractor), Doug Hammond (Enduring) and Floyd Bartlett (DWR), invited but choosing not to attend Ed Bonner (SITLA).

Per surface use proposal in Application for Permit to Drill reserve pit will be fenced on three sides while well is being drilled, with the fourth side being fenced immediately upon completion of drilling. No significant wildlife concerns exist, DWR is not recommending restrictions.

Reviewer: Bart Kettle **Date:** April 14, 2005

Conditions of Approval/Application for Permit to Drill:

None.

ON-SITE PREDRILL EVALUATION
Division of Oil, Gas and Mining

OPERATOR: Enduring Resources, LLC
WELL NAME & NUMBER: Big Pack 12-21-22-2
API NUMBER: 43-047-36423
LEASE: State **FIELD/UNIT:** Wildcat
LOCATION: 1/4,1/4 SENW **Sec:** 2 **TWP:** 12S **RNG:** 21E 1925 FNL 2097 FWL
LEGAL WELL SITING: 460 F **SEC. LINE;** 460 F **1/4,1/4 LINE;** 920 F **ANOTHER WELL.**
GPS COORD (UTM): X =625331 E; Y =4406885 N **SURFACE OWNER:** State

PARTICIPANTS

Bart Kettle(DOGM), Mike (Dirt Contractor), Doug Hammond (Enduring), and Floyd Bartlett (DWR).

REGIONAL/LOCAL SETTING & TOPOGRAPHY

Proposed location is ~26 miles southeast of Ouray, Uintah County, Utah. The immediate area surrounding the proposed well is a series of rolling ridges and dry washes, vegetation is dominated by Wyoming sage and Pinyon/Juniper communities. The proposed location sits in an 8-10" precipitation zone, ground cover is sparse and soils tend to be erosive in nature. Slopes are generally mild with shallow soils and small sandstone outcrops. Access to this well will be along existing county roads. Drainage is to the northeast entering the White River ~20 miles away. There are no observed perennial water sources in close proximity to the well and dry washes appear to only flow during extreme rain events.

SURFACE USE PLAN

CURRENT SURFACE USE: Seasonal livestock grazing, wildlife habitat.

PROPOSED SURFACE DISTURBANCE: 330' x 225', 240' of new access road.

LOCATION OF EXISTING WELLS WITHIN A 1 MILE RADIUS: None

LOCATION OF PRODUCTION FACILITIES AND PIPELINES: Production facilities such as separators, dehydrators, flow meters and tanks will be located on-site. Those production facilities, which contain fluids, will have a dike constructed completely around them. The Sales Gas line will be installed along the access route if the well is capable of economic production.

SOURCE OF CONSTRUCTION MATERIAL: On-site, any gravel needed will be obtained from a commercial source.

ANCILLARY FACILITIES: None required

WILL DRILLING AT THIS LOCATION GENERATE PUBLIC INTEREST OR CONCERNS? (EXPLAIN): Drilling at this location is not expected to generate public interest. The closest residence is located 10 miles away in Willow Creek, and is only part year residence.

WASTE MANAGEMENT PLAN:

Garbage and other trash will be contained in a self-contained trash container. Refuse will be transported to an approved sanitary landfill. Sewage will be handled in self-contained portable toilets and contents hauled off location to an authorized facility in accordance with State and local regulations.

Reserve pit will be fenced and lined according to procedures submitted in the Application to Drill. Fence will be built on three sides while drilling, with the fourth side being fenced upon the removal of the drilling rig. Pit will be lined, drill cuttings will be constrained in the reserve pit. Produced liquid hydrocarbons will be constrained in test tanks during completion and testing.

ENVIRONMENTAL PARAMETERS

AFFECTED FLOODPLAINS AND/OR WETLANDS: Well pad is located on the edge of a small alluvial fan. Construction at this location will create a short-term increase of sedimentation into the watershed, but is not expected to have significant long-term impacts. Alteration of drainage for the construction of this location in not expected to affect the function or stability of the watershed up or down stream of the location.

FLORA/FAUNA: Mule Deer, Elk, rabbits, rodents, songbirds, raptors, lizards and snakes.
Grasses: Curly galleta, bottlebrush squirreltail, and Indian ricegrass. Forbs: None noted. Shrubs: Wyoming sage, spiny hopsage, black greasewood and spiny phlox. Trees: Utah Juniper

SOIL TYPE AND CHARACTERISTICS: Gray sandy clay, alluvial deposits and gray sandstone fragments.

SURFACE FORMATION & CHARACTERISTICS: Uinta Formation. Formation consists of rolling ridges and small draws with small sandstone bluffs developing into steep canyons further north.

EROSION/SEDIMENTATION/STABILITY: Fine soils prone to wind erosion. Soils are erosive in nature, with topsoil in a thin layer to moderately deep layer over most of the area. All soils are subject to significant erosion during rain events sufficient to create flows.

PALEONTOLOGICAL POTENTIAL: None noted

RESERVE PIT

CHARACTERISTICS: 75'x170'x8'

LINER REQUIREMENTS (Site Ranking Form attached): Liner is optional.

SURFACE RESTORATION/RECLAMATION PLAN

As per surface use agreement, provided well produces economical quantities future directional wells will be drilled from the same location.

SURFACE AGREEMENT: Per SITLA mineral lease.

CULTURAL RESOURCES/ARCHAEOLOGY:

OTHER OBSERVATIONS/COMMENTS

Site is classified as high value deer and substantial value elk range. Could be ferruginous hawks in scattered juniper, no nests in P/J observed during on-site. No stipulations recommended.

ATTACHMENTS

Photos of this location were taken and placed on file.

Bart Kettle	April 14, 2005 11:57 A.M.
DOGM REPRESENTATIVE	DATE/TIME

Evaluation Ranking Criteria and Ranking Score
For Reserve and Onsite Pit Liner Requirements

Site-Specific Factors	Ranking	Site Ranking
Distance to Groundwater (feet)		
>200	0	
100 to 200	5	
75 to 100	10	
25 to 75	15	
<25 or recharge area	20	0
Distance to Surf. Water (feet)		
>1000	0	
300 to 1000	2	
200 to 300	10	
100 to 200	15	
< 100	20	0
Distance to Nearest Municipal Well (feet)		
>5280	0	
1320 to 5280	5	
500 to 1320	10	
<500	20	0
Distance to Other Wells (feet)		
>1320	0	
300 to 1320	10	
<300	20	0
Native Soil Type		
Low permeability	0	
Mod. permeability	10	
High permeability	20	10
Fluid Type		
Air/mist	0	
Fresh Water	5	
TDS >5000 and <10000	10	
TDS >10000 or Oil Base Mud Fluid containing significant levels of hazardous constituents	15 20	5
Drill Cuttings		
Normal Rock	0	
Salt or detrimental	10	0
Annual Precipitation (inches)		
<10	0	
10 to 20	5	
>20	10	0
Affected Populations		
<10	0	
10 to 30	6	
30 to 50	8	
>50	10	0
Presence of Nearby Utility Conduits		
Not Present	0	
Unknown	10	
Present	15	0

Final Score 15 (Level II Sensitivity)

Sensitivity Level I = 20 or more; total containment is required, consider criteria for excluding pit use.
Sensitivity Level II = 15-19; lining is discretionary.
Sensitivity Level III = below 15; no specific lining is required.


APR 12 2005


APR 12 2005

STATE ACTIONS
Resource Development Coordinating Committee
Governor's Office of Planning and Budget
5110 State Office Building
SLC, UT 84114
Phone No. 537-9230

1. State Agency	**2. Approximate date project will start:**
Oil, Gas and Mining 1594 West North Temple, Suite 1210 Salt Lake City, UT 84114-5801	Upon Approval or April 4, 2005

3. Title of proposed action:
Application for Permit to Drill

4. Description of Project:

Enduring Resources, LLC proposes to drill the Agency Draw 12-21-31-36 well (wildcat) on State lease ML-47086, Uintah County, Utah. This action is being presented to the RDCC for consideration of resource issues affecting state interests. The Division of Oil, Gas and Mining is the primary administrative agency in this action and must issue approval before operations commence.

5. Location and detailed map of land affected (site location map required, electronic GIS map preferred)
(include UTM coordinates where possible) **(indicate county)**
760' FNL 1806' FEL, NW/4 NE/4,
Section 36, Township 12 South, Range 21 East, Uintah County, Utah

6. Possible significant impacts likely to occur:
Surface impacts include up to five acres of surface disturbance during the drilling and completion phase (estimated for five weeks duration). If oil and gas in commercial quantities is discovered, the location will be reclaimed back to a net disturbance of between one and two acres – not including road, pipeline, or utility infrastructure. If no oil or gas is discovered, the location will be completely reclaimed.

7. Identify local government affected
a. Has the government been contacted? No.
b. When?
c. What was the response?
d. If no response, how is the local government(s) likely to be impacted?

8. For acquisitions of land or interests in land by DWR or State Parks please identify state representative and state senator for the project area. Name and phone number of state representative, state senator near project site, if applicable:
a. Has the representative and senator been contacted? N/A

9. Areawide clearinghouse(s) receiving state action: (to be sent out by agency in block 1)
Uintah Basin Association of Governments

10. For further information, contact:	**11. Signature and title of authorized officer**
Diana Whitney **Phone:** (801) 538-5312	John R. Baza, Associate Director **Date:** March 21, 2005

Well name:	**04-05 Enduring Big Pack 12-21-22-2**
Operator:	**Enduring Resources, LLC**
String type:	Surface
Project ID:	43-047-36423
Location:	Uintah County

Design parameters:

Collapse
Mud weight: 8.400 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 1,760 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 2,000 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on buoyed weight.
Neutral point: 1,748 ft

Environment:
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 103 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 90 ft

Cement top: 352 ft

Non-directional string.

Re subsequent strings:
Next setting depth: 8,100 ft
Next mud weight: 9.800 ppg
Next setting BHP: 4,124 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 2,000 ft
Injection pressure 2,000 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	2000	8.625	24.00	J-55	ST&C	2000	2000	7.972	96.3

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	873	1370	1.570	2000	2950	1.48	42	244	5.82 J

Prepared by: Clinton Dworshak
Utah Div. of Oil & Mining
Phone: 801-538-5280
FAX: 801-359-3940
Date: April 18,2005
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 2000 ft, a mud weight of 8.4 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

Well name:	**04-05 Enduring Big Pack 12-21-22-2**
Operator:	**Enduring Resources, LLC**
String type:	Production
Project ID:	43-047-36423
Location:	Uintah County

Design parameters:

Collapse
Mud weight: 9.800 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 3,152 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 4,124 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on buoyed weight.
Neutral point: 6,913 ft

Environment:
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 188 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,500 ft

Cement top: Surface

Non-directional string.

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	8100	4.5	11.60	N-80	LT&C	8100	8100	3.875	187.8

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	4124	6350	1.540	4124	7780	1.89	80	223	2.78 J

Prepared by: Clinton Dworshak, Utah Div. of Oil & Mining
Phone: 801-538-5280
FAX: 801-359-3940
Date: April 18,2005
Salt Lake City, Utah

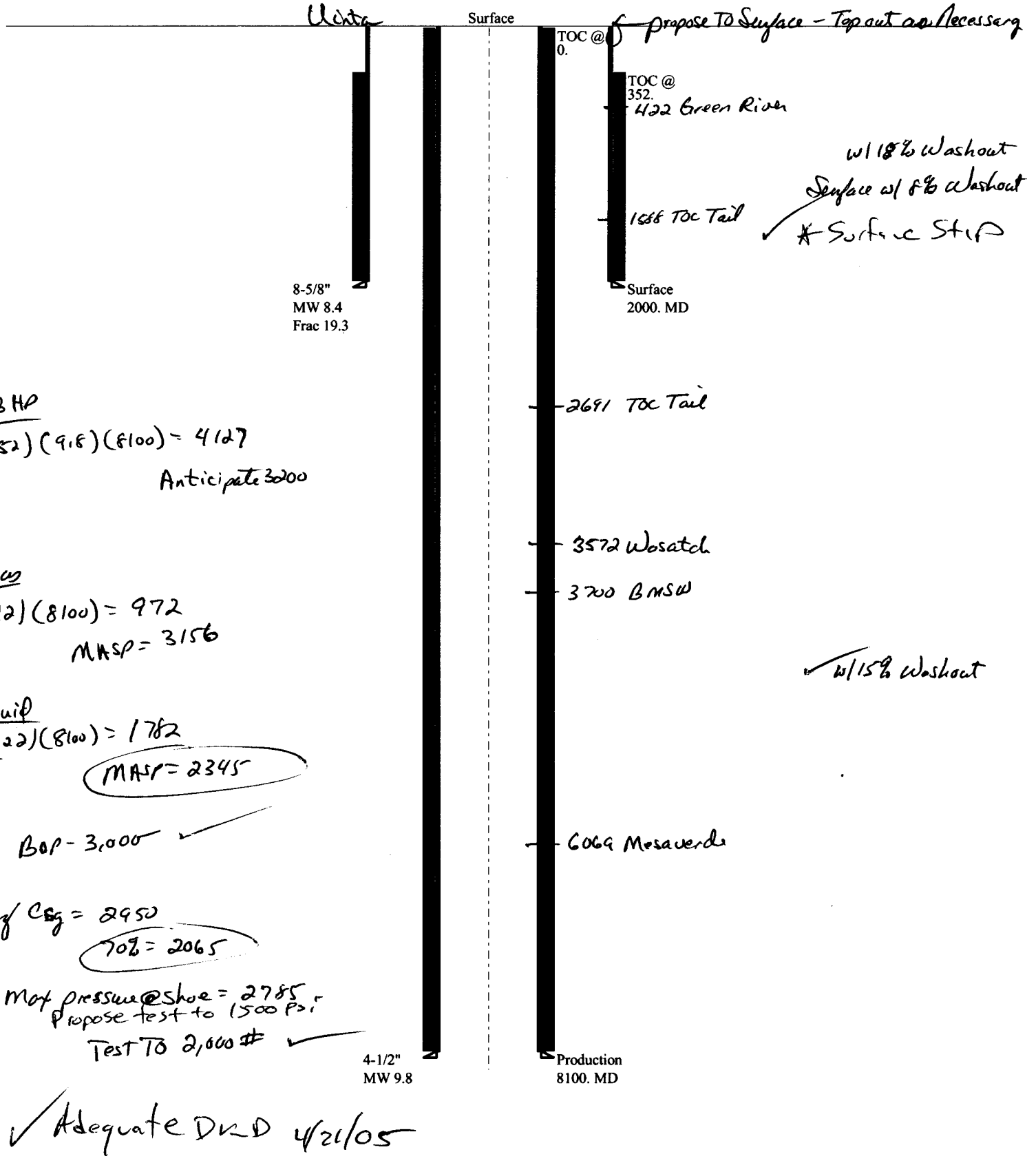
Remarks:
Collapse is based on a vertical depth of 8100 ft, a mud weight of 9.8 ppg The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

4-05 Enduring Big Pack 12-22-2

Casing Schematic



BHP

(.052)(9.8)(8100) = 4127

Anticipate 3200

Gas

(.12)(8100) = 972

MASP = 3156

fluid

(.22)(8100) = 1782

MASP = 2345

BOP - 3,000 ✓

Surf Csg = 2950

70% = 2065

Max pressure @ shoe = 2785

Propose test to 1500 psi

Test TO 2,000 # ✓

✓ Adequate DKD 4/21/05

From: Ed Bonner
To: Whitney, Diana
Date: 4/28/2005 11:41:38 AM
Subject: Well Clearance

The following wells have been given cultural resource clearance by the Trust Lands Cultural Resources Group:

Westport Oil & Gas Company
- NBU 922-36C
- NBU 922-36G
- NBU 922-36H
- NBU 922-36N
- NBU 922-36O
- NBU 921-33O

Enduring Resources, LLC
- Agency Draw 12-21-31-36
- Big Pack 12-21-22-2
- Southam Canyon 10-25-21-32
- Southam Canyon 9-25-22-32

EOG Resources, Inc
- NBU 548-12E
- Chapita Wells Unit 953-32
- Chapita Wells Unit 957-32

The Houston Exploration Company
- Southman Canyon 11-36-9-23
- Southman Canyon 13-36-9-23

If you have any questions regarding this matter please give me a call.

CC: Garrison, LaVonne; Hill, Brad; Hunt, Gil

004

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

State of Utah

Department of Natural Resources

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas & Mining

MARY ANN WRIGHT
Acting Division Director

April 28, 2005

Enduring Resources, LLC
475 17th St., Suite 1500
Denver, CO 80202

Re: Big Pack 12-21-22-2 Well, 1925' FNL, 2097' FWL, SE NW, Sec. 2, T. 12 South, R. 21 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-36423.

Sincerely,

for John R. Baza
Associate Director

pab
Enclosures

cc: Uintah County Assessor
SITLA

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801
telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • *www.ogm.utah.gov*

Operator: Enduring Resources, LLC
Well Name & Number Big Pack 12-21-22-2
API Number: 43-047-36423
Lease: ML 47084

Location: SE NW **Sec.** 2 **T.** 12 South **R.** 21 East

Conditions of Approval

1. **General**
   Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

2. **Notification Requirements**
   The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:
   - 24 hours prior to cementing or testing casing
   - 24 hours prior to testing blowout prevention equipment
   - 24 hours prior to spudding the well
   - within 24 hours of any emergency changes made to the approved drilling program
   - prior to commencing operations to plug and abandon the well

   The following are Division of Oil, Gas and Mining contacts and their work telephone numbers (please leave a voice mail message if the person is not available to take the call):
   - Dan Jarvis at (801) 538-5338
   - Carol Daniels at (801) 538-5284 (spud)

3. **Reporting Requirements**
   All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.

5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)

6. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

7. Surface casing shall be cemented to the surface.

CONFIDENTIAL FORM 9

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

005

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER:	ML-47084
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	N/A
7. UNIT or CA AGREEMENT NAME:	N/A
1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER	8. WELL NAME and NUMBER: Big Pack 12-21-22-2
2. NAME OF OPERATOR: Enduring Resources, LLC	9. API NUMBER: 4304736423
3. ADDRESS OF OPERATOR: 475 17th Street, Suite 1500 CITY Denver STATE CO ZIP 80202 / PHONE NUMBER: (303) 350-5114	10. FIELD AND POOL, OR WILDCAT: Undesignated
4. LOCATION OF WELL: FOOTAGES AT SURFACE: 1925' FNL 2097' FWL S.L.B.&M. / COUNTY: Uintah	
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENW 2 12S 21E / STATE: UTAH	

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☑ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start:	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☑ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☐ OTHER:
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Attached are Topographic Maps "A" & "B" clarifying the two-track portion of the access route to the proposed well location. Approximately 15,300' (2.89 miles) of the two-track road will be bladed to remove existing ruts to allow access to the location. Please replace the Topographic Maps "A" & "B", submitted with the APD on March 17, 2005, with the attached data. The proposed well location, access route and pipeline route did not change.

Surface Use Plan Revision - Ancillary Facilities: During drilling operations, approximately 20 days, the site will be a manned camp. Three or four additional trailers will be on location to serve as the crew's housing and eating facility. These will be located on the perimeter of the pad site within the topsoil stockpiles. No additional surface disturbance will occur from what was proposed in the initial APD. The previously submitted waste management procedures remain in effect.

Utah State Bond #RLB0008031
Operator # N2750

Accepted by the Utah Division of Oil, Gas and Mining
Date: 04-18-05
By: [signature]

COPY SENT TO OPERATOR
Date: 4-18-05
Initials: CHD

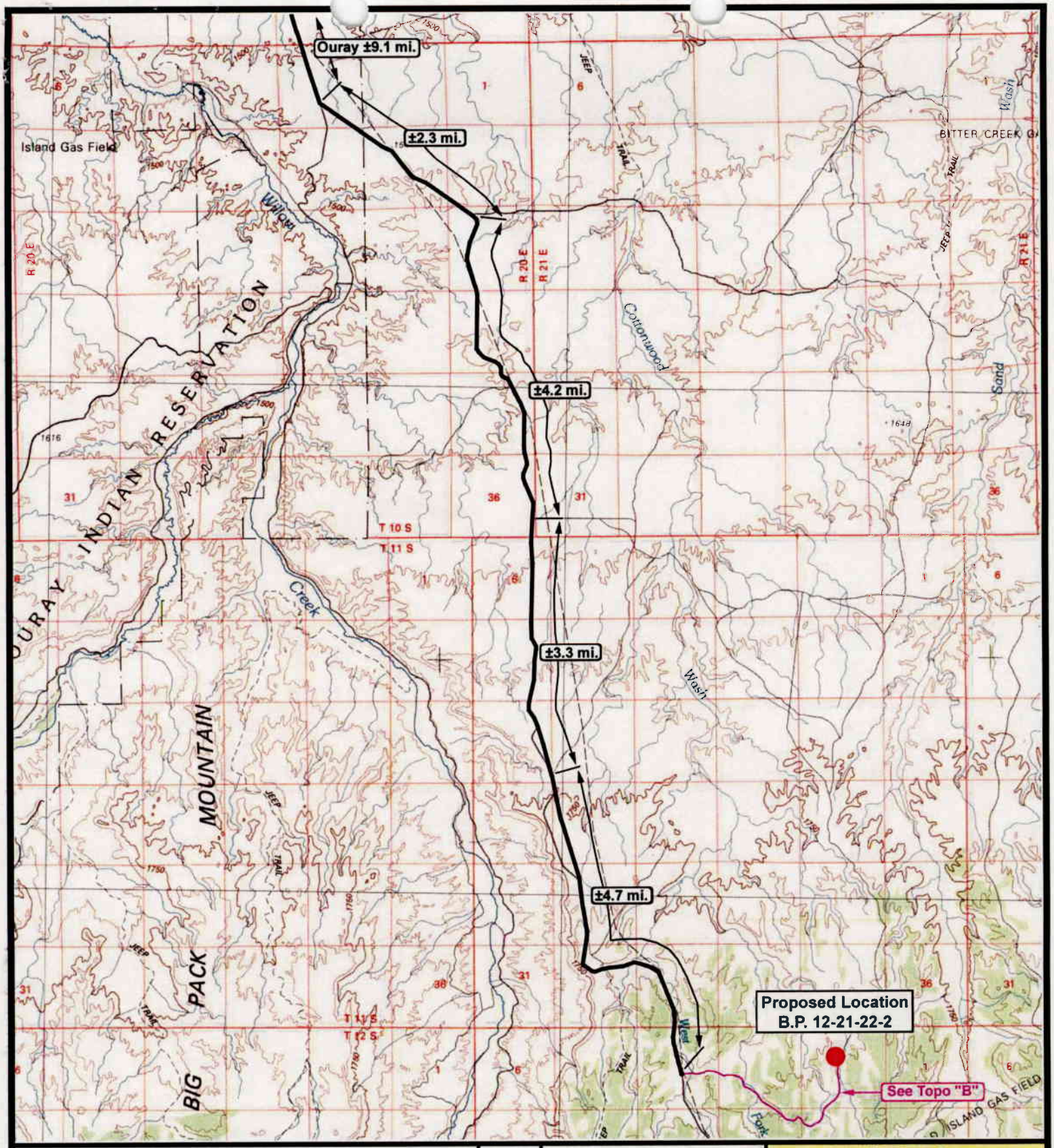
NAME (PLEASE PRINT) Phyllis Sobotik TITLE Regulatory Specialist

SIGNATURE Phyllis Sobotik DATE April 6 2005

(This space for State use only)

RECEIVED
APR 11 2005
DIV. OF OIL, GAS & MINING

(5/2000) (See Instructions on Reverse Side)



ENDURING
-Resources-

Big Pack 12-21-22-2
SEC 2, T12S, R21E, S.L.B.&M.

N

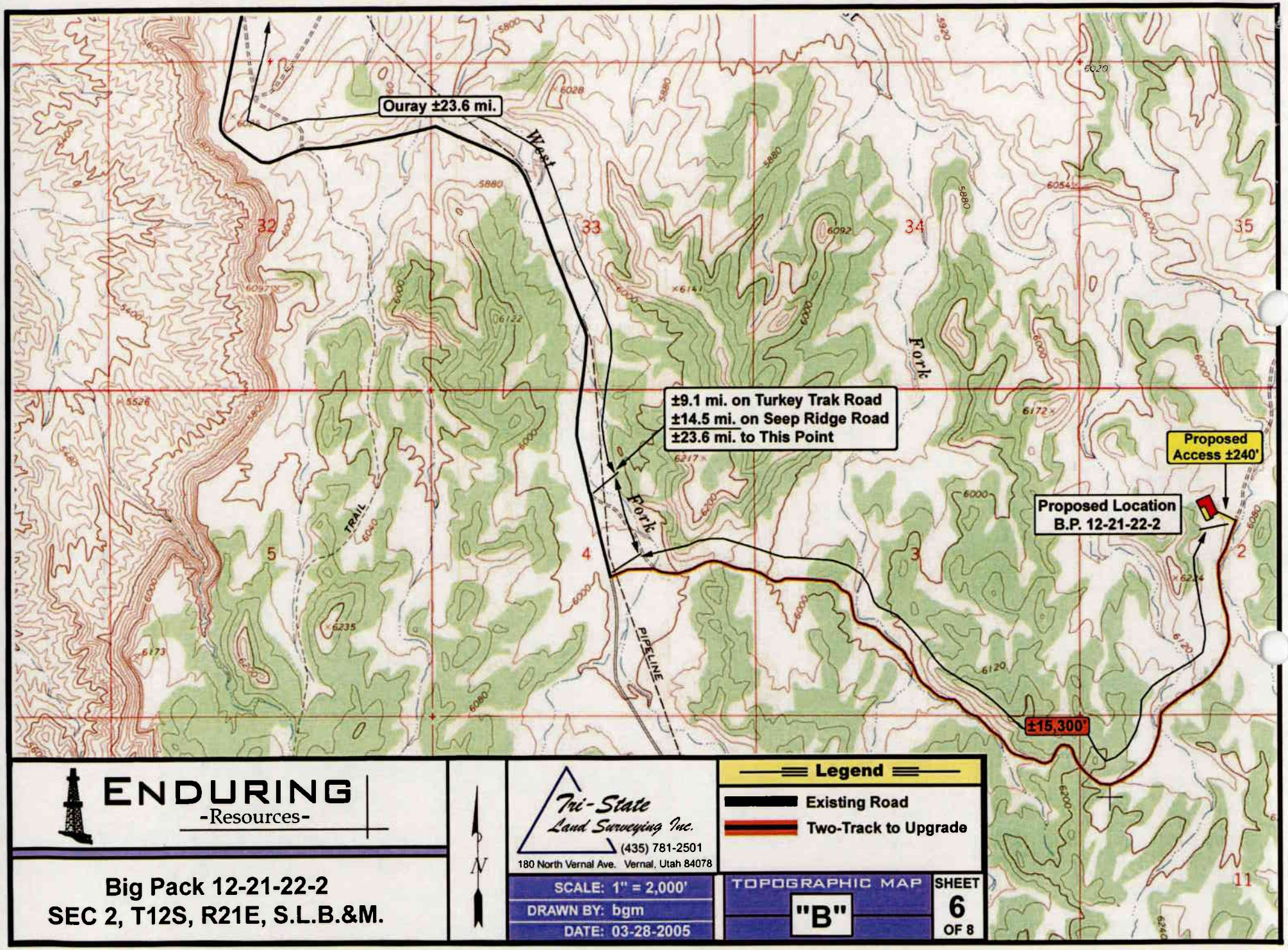
Tri-State Land Surveying Inc.
(435) 781-2501
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 100,000'
DRAWN BY: bgm
DATE: 03-28-2005

Legend
Existing Road
Proposed Access

TOPOGRAPHIC MAP "A"

SHEET 5 OF 8



ENDURING
-Resources-

Big Pack 12-21-22-2
SEC 2, T12S, R21E, S.L.B.&M.

N

Tri-State Land Surveying Inc.
(435) 781-2501
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2,000'
DRAWN BY: bgm
DATE: 03-28-2005

Legend
Existing Road
Two-Track to Upgrade

TOPOGRAPHIC MAP "B"

SHEET 6 OF 8

CONFIDENTIAL

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

Name of Company: **ENDURING RESOURCES LLC**

Well Name: **BIG PACK 12-21-22-2**

Api No: **43-047-36423** Lease Type: **STATE**

Section **02** Township **12S** Range **21E** County **UINTAH**

Drilling Contractor **PETE MARTIN'S** RIG # **RATHOLE**

SPUDDED:

Date **08/02/05**

Time **9:00 AM**

How **DRY**

Drilling will Commence:

Reported by **DOUG HAMMOND**

Telephone # **1-435-790-6996**

Date **08/03/05** **Signed** **CHD**

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 6

ENTITY ACTION FORM

Operator: Enduring Resources, LLC
Operator Account Number: N 2750
Address: 475 17th Street, Suite 1500
city Denver
state CO zip 80202
Phone Number: (303) 350-5114

Well 1

API Number	Well Name	QQ	Sec	Twp	Rng	County
4304736423	Big Pack 12-21-22-2	SENW	2	12S	21E	Uintah

Action Code	Current Entity Number	New Entity Number	Spud Date	Entity Assignment Effective Date
A	99999	14870	8/2/2005	8/11/05

Comments: MVRD CONFIDENTIAL

Well 2

API Number	Well Name	QQ	Sec	Twp	Rng	County
4304731774	Cottonwood Wash Unit 1	SWNE	10	12S	21E	Uintah

Action Code	Current Entity Number	New Entity Number	Spud Date	Entity Assignment Effective Date
C	99999		8/3/2005	

Comments: Re-entry w/in csg of P&A well; Not deepening Lease Serial #-UTU-40729
WSTC = 16754

Well 3

API Number	Well Name	QQ	Sec	Twp	Rng	County

Action Code	Current Entity Number	New Entity Number	Spud Date	Entity Assignment Effective Date

Comments:

ACTION CODES:

- A -- Establish new entity for new well (single well only)
- B -- Add new well to existing entity (group or unit well)
- C -- Re-assign well from one existing entity to another existing entity
- D -- Re-assign well from one existing entity to a new entity
- E -- Other (Explain in 'comments' section)

Phyllis Sobotik
Name (Please Print)
Phyllis Sobotik
Signature
Regulatory Specialist
Title
Aug 5 2005
Date

(5/2000)

RECEIVED
AUG 05 2005
DIV. OF OIL, GAS & MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER:	ML-47084
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	N/A
7. UNIT or CA AGREEMENT NAME:	N/A
1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER	8. WELL NAME and NUMBER: Big Pack 12-21-22-2
2. NAME OF OPERATOR: Enduring Resources, LLC	9. API NUMBER: 4304736423
3. ADDRESS OF OPERATOR: 475 17th Street, Suite 1500 CITY Denver STATE CO ZIP 80202 / PHONE NUMBER: (303) 350-5114	10. FIELD AND POOL, OR WILDCAT: Undesignated

CONFIDENTIAL

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 1925' FNL 2097' FWL S.L.B.&M. COUNTY: Uintah

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENW 2 12S 21E STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start:	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☑ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion: 8/2/2005	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: Spud - Set Conductor Csg
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The Big Pack #12-21-22-2 surf hole spud @ 09:00 hrs (MST) 8/2/05.

MIRU Pete Martin Rathole Drlg Inc. Drl 40' of 20" hole. Run 40' 14" line pipe for conductor. Cmt in place w/ 3 yds Readymix concrete. Cmt to surf. WORT

Utah State Bond # RLB0008031
Operator No. N2750

NAME (PLEASE PRINT) Phyllis Sobotik TITLE Regulatory Specialist

SIGNATURE Phyllis Sobotik DATE Aug 5 2005

(This space for State use only)

RECEIVED
AUG 10 2005
DIV. OF OIL, GAS & MINING

(5/2000) (See Instructions on Reverse Side)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER: ML-47084
6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A
7. UNIT or CA AGREEMENT NAME: N/A
8. WELL NAME and NUMBER: Big Pack 12-21-22-2
9. API NUMBER: 4304736423
10. FIELD AND POOL, OR WILDCAT: Undesignated

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER

CONFIDENTIAL

2. NAME OF OPERATOR: Enduring Resources, LLC
3. ADDRESS OF OPERATOR: 475 17th Street, Suite 1500 CITY Denver STATE CO ZIP 80202 PHONE NUMBER: (303) 350-5114
4. LOCATION OF WELL
FOOTAGES AT SURFACE: 1925' FNL 2097' FWL S.L.B.&M. COUNTY: Uintah
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENW 2 12S 21E STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start:	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☑ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion: 8/29/2005	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: Set & Cement Surface Csg
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Drlg 12-1/4" hole to 2260'. Circ hole clean. TOOH LDDP. RIH w/ cmt guide shoe, 1 jt 8-5/8" 24# J-55 ST&C csg, FC & 47 jts 8-5/8" 24# J-55 ST&C csg. Set csg @ 2219'. Used 8 centralizers. RU Big 4 Cementers. Pumped 130 BW, 30 bbls gel spacer. Lead: 270 sx (168 bbls) Cl G containing 16% gel & 1/4 # flocele. Yield: 3.5 ft3/sk. MW: 11.1 ppg. MWR: 23 gps. Tail: 250 sx (51 bbls) Cl G containing 2% CaCl2, 1/4# flocele. Yield: 1.15 ft3/sk. MW: 15.8 ppg. MWR: 5 gps. Circ 25 bbls cmt to pit. Cmt fell back. Mixed 100 sx (20 bbls) Cl G containing 3% CaCl2. Yield: 1.15 ft3/sk. MW: 15.8 ppg. MWR: 5 gps. Cmt fell back again. Mixed 50 sx (10 bbls) Cl G cmt containing 3% CaCl2. Cmt remained @ surf. WORT

Utah State Bond # RLB0008031
Operator No. N2750

NAME (PLEASE PRINT) Phyllis Sobotik TITLE Regulatory Specialist
SIGNATURE Phyllis Sobotik DATE Sept 1 2005

(This space for State use only)

RECEIVED
SEP 06 2005
DIV. OF OIL, GAS & MINING

(5/2000) (See Instructions on Reverse Side)

FORM 9

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER: ML 47084
6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A
7. UNIT or CA AGREEMENT NAME: N/A
8. WELL NAME and NUMBER: Big Pack 12-21-22-2
9. API NUMBER: 4304736423
10. FIELD AND POOL, OR WILDCAT: Wildcat

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER

CONFIDENTIAL

2. NAME OF OPERATOR: Enduring Resources, LLC
3. ADDRESS OF OPERATOR: 475 17th St, Suite 1500 CITY Denver STATE CO ZIP 80202 PHONE NUMBER: (303) 350-5114
4. LOCATION OF WELL
FOOTAGES AT SURFACE: 1,925' FNL - 2,097' FWL S.L.B.& M. COUNTY: Uintah
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENW 2 12S 21E STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start:	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☑ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: Spud, Set Conductor and Surface Casing
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Surface Hole spudded @ 0900 hrs (MST) 08-02-2005

MOVE IN PETE MARTIN RATHOLE SERVICE AND DRILL 40 FT OF 20" HOLE, RUN 40 FT OF 14" LINE PIPE AND CEMENT IN PLACE WITH 3 YARDS OF READYMIX
DRILL 12 1/4" HOLE TO 2260 FT. RIH WITH CEMENT GUIDE SHOE, 1 JT 8 5/8" 24# CASING, FLOAT COLLAR AND 47 JTS 8 5/8". CASING LANDED AT 2219 FT. USED 8 CENTRALIZERS ON CASING. BIG 4 CEMENTERS PUMPED 130 BW, 30 BBLS GEL SPACER, (LEAD) 270 SX CLASS G, 16% GEL AND 1/4# FLOWCELE, 11.1 PPG, 23 GAL WATER/SX, YIELD 3.5 CUFT/SX, 168 BBLS SLURRY. (TAIL) 250 SX CLASS G 2% C ACL2, 1/4# FLOWCELE, 15.8 PPG, 5 GAL/SX WATER, YIELD 1.15 CUFT/SX, 51 BBLS SLURRY. CIRCULATED 25 BBLS SLURRY TO PIT. CEMENT FELL BACK MIXED 100 SX CLASS G 3% CACL2 (STATS SAME AS TAIL) 20 BBLS. SLURRY. CEMENT FELL BACK AGAIN, MIXED 50 SX CLASS G 3% CACL2 10 BBLS SLURRY. CEMENT HELD AT SURFACE.
WAITING ON ROTARY TOOLS

Utah State Bond #RLB0008031
Operator No. N2750

NAME (PLEASE PRINT) Alvin R. (Al) Arlian TITLE Landman - Regulatory Specialist

SIGNATURE DATE 9/27/2005

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SEP 30 2005
DIV. OF OIL, GAS & MINING

(5/2000) (See Instructions on Reverse Side)

FORM 9

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

5. LEASE DESIGNATION AND SERIAL NUMBER: ML 47084

SUNDRY NOTICES AND REPORTS ON WELLS

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

7. UNIT or CA AGREEMENT NAME: N/A

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER CONFIDENTIAL

8. WELL NAME and NUMBER: Big Pack 12-21-22-2

2. NAME OF OPERATOR: Enduring Resources, LLC

9. API NUMBER: 4304736423

3. ADDRESS OF OPERATOR: 475 17th St, Suite 1500 CITY Denver STATE CO ZIP 80202

PHONE NUMBER: (303) 350-5114

10. FIELD AND POOL, OR WILDCAT: Wildcat

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 1,925' FNL - 2,097' FWL S.L.B.& M.

COUNTY: Uintah

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENW 2 12S 21E

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☑ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start: 10/30/2005	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: Correction of TD
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Correction of planned total depth.

Change planned total depth from 8,100' to 8,310'

Utah State Bond #RLB0008031
Operator No. N2750

COPY SENT TO OPERATOR
Date: 11-7-05
Initials: CHD

NAME (PLEASE PRINT) Alvin R. (Al) Arlian TITLE Landman - Regulatory Specialist

SIGNATURE [signature] DATE 10/24/2005

(This space for State use only)

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 10/31/05
BY: [signature]

(See Instructions on Reverse Side)

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OCT 26 2005
DIV. OF OIL, GAS & MINING

(5/2000)

RECEIVED
NOV 07 2005
DIV. OF OIL, GAS & MINING

FORM 9

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER: ML 47084

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A

7. UNIT or CA AGREEMENT NAME: N/A

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER CONFIDENTIAL

8. WELL NAME and NUMBER: Big Pack 12-21-22-2

2. NAME OF OPERATOR: Enduring Resources, LLC

9. API NUMBER: 4304736423

3. ADDRESS OF OPERATOR: 475 17th St, Suite 1500 CITY Denver STATE CO ZIP 80202

PHONE NUMBER: (303) 350-5114

10. FIELD AND POOL, OR WILDCAT: Wildcat

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 1,925' FNL - 2,097' FWL S.L.B.& M.

COUNTY: Uintah

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENW 2 12S 21E

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☑ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start: 11/9/2005	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: Increase TD
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Increase planned total depth.

Change planned total depth from 8,100' to 8,310' (prior request)

Change planned total depth from above to 8,850'.

No sour gas and/or increase in pressures from the original APD is anticipated.

Utah State Bond #RLB0008031
Operator No. N2750

COPY SENT TO OPERATOR
Date: 11-15-05
Initials: CHD

NAME (PLEASE PRINT) Alvin R. (Al) Arlian TITLE Landman - Regulatory Specialist

SIGNATURE [signature] DATE 11/3/2005

(This space for State use only)

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 11/10/05
BY: [signature]

(5/2000) (See Instructions on Reverse Side)

Well name:	**04-05 Enduring Big Pack 12-21-22-2**
Operator:	**Enduring Resources, LLC**
String type:	Production
Project ID:	43-047-36423
Location:	Uintah County

Design parameters:

Collapse

Mud weight: 9.800 ppg
Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: ~~3,152~~ 2563 psi
Internal gradient: ~~0.120 psi/ft~~ 0.22
Calculated BHP ~~4,124 psi~~ 4510

No backup mud specified.

3M proposed
✓ Adequate DWD 11/19/05

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on buoyed weight.
Neutral point: 6,913 ft

Environment:
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 188 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,500 ft

Cement top: Surface

Non-directional string.

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	~~8100~~ 8850	4.5	11.60	N-80	LT&C	8100	8100	3.875	187.8

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	~~4124~~ 4510	6350	~~1.540~~ ✓1.408	~~4124~~ 4510	7780	~~1.89~~ ✓1.725	~~80~~ 102 (non buoyed)	223	~~2.78 J~~ ✓2.17

Prepared by: Clinton Dworshak, Utah Div. of Oil & Mining
Phone: 801-538-5280
FAX: 801-359-3940
Date: April 18,2005
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 8100 ft, a mud weight of 9.8 ppg The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

FORM 9

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

5. LEASE DESIGNATION AND SERIAL NUMBER: ML-47084

SUNDRY NOTICES AND REPORTS ON WELLS

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER

8. WELL NAME and NUMBER: Big Pack 12-21-22-2

2. NAME OF OPERATOR: Enduring Resources, LLC

9. API NUMBER: 4304736423

3. ADDRESS OF OPERATOR: 475 17th Street, Suite 1500 CITY Denver STATE CO ZIP 80202

PHONE NUMBER: (303) 573-1222

10. FIELD AND POOL, OR WILDCAT:

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 1925' FNL & 2097' FWL

COUNTY: Uintah

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENW 2 12S 21E S

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☑ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start: _____	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion: _____	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: Change well name and number
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

CHANGE WELL NAME AND NUMBER:

FROM: Big Pack 12-21-22-2
TO: Big Pack 12-2-22-2

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY

NAME (PLEASE PRINT) Alvin R. (Al) Arlian TITLE Landman - Regulartory Specialist

SIGNATURE _____ DATE 11/10/2005

(This space for State use only)

RECEIVED
NOV 14 2005

(5/2000) (See Instructions on Reverse Side)

ENDURING RESOURCES, LLC
425 Seventeenth Street, Suite 1500
Denver, Colorado 80202
Telephone: 303-573-1222
Facsimile: 303-573-0461

CONFIDENTIAL

January 13, 2006

State of Utah
Division of Oil, Gas and Mining
P.O. Box 145801
Salt Lake City, Utah 84114-5801

RE: Well Logs
Big Pack 12-21-22-2
Uintah County, Utah

T12S R21E S-02
43-047-36423

Ladies and Gentlemen:

Attached is one original copy of the logs run on the above-referenced well.

Please hold this information as "confidential" as long as permitted.

Should you have any questions concerning this matter, please do not hesitate to call 303-350-5114 (aarlian@enduringresources.com).

Very truly yours

ENDURING RESOURCES, LLC

Alvin R. (Al) Arlian
Landmen – Regulatory Specialist

ara/
Enclosures as stated:

RECEIVED
JAN 23 2006
DIV. OF OIL, GAS & MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

CONFIDENTIAL

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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5. LEASE DESIGNATION AND SERIAL NUMBER:	ML 47084
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	N/A
7. UNIT or CA AGREEMENT NAME:	N/A
1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER	8. WELL NAME and NUMBER: Big Pack 12-21-22-2
2. NAME OF OPERATOR: Enduring Resources, LLC	9. API NUMBER: 4304736423
3. ADDRESS OF OPERATOR: 475 17th St, Suite 1500 CITY Denver STATE CO ZIP 80202	PHONE NUMBER: (303) 350-5114
	10. FIELD AND POOL, OR WILDCAT: Wildcat

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 1,925' FNL - 2,097' FWL S.L.B.& M. COUNTY: Uintah

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENW 2 12S 21E STATE: UTAH

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	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☑ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☑ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
3/17/2006	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☐ OTHER:
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Notice of first sales.

3-17-2006 60 mcf, well froze off,
3-18-2006 323 mcf, and
3-19-2006 279 mcf, 300#'s FTP, 825#'s FCP, 164#'s LP.

Well still returning load water.

Completion Report to Follow.

NAME (PLEASE PRINT) Alvin R. (Al) Arlian TITLE Landman - Regulatory Specialist

SIGNATURE [signature] DATE 3/22/2006

(This space for State use only)

MAR 27 2006

(5/2000)

(See Instructions on Reverse Side)

FORM 9

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

5. LEASE DESIGNATION AND SERIAL NUMBER: ML 47084

SUNDRY NOTICES AND REPORTS ON WELLS

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A

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7. UNIT or CA AGREEMENT NAME: N/A

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER

8. WELL NAME and NUMBER: Big Pack 12-21-22-2

2. NAME OF OPERATOR: Enduring Resources, LLC

9. API NUMBER: 4304736423

3. ADDRESS OF OPERATOR: 475 17th St, Suite 1500 CITY Denver STATE CO ZIP 80202

PHONE NUMBER: (303) 350-5114

10. FIELD AND POOL, OR WILDCAT: Wildcat

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 1,925' FNL - 2,097' FWL S.L.B.& M.

COUNTY: Uintah

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENW 2 12S 21E

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start: _____	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☑ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion: 11/15/2006	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☑ RECLAMATION OF WELL SITE	☑ OTHER: Pit rehab and reseeding.
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Have closed the pits and reseeded.

Utah State Bond #RLB0008031
Operator No. N2750

NAME (PLEASE PRINT) Alvin R. (Al) Arlian TITLE Landman - Regulatory Specialist

SIGNATURE _____ DATE 11/15/2006

(This space for State use only)

RECEIVED
NOV 20 2006
DIV. OF OIL, GAS & MINING

(5/2000) (See Instructions on Reverse Side)

CONFIDENTIAL

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

AMENDED REPORT ☐ (highlight changes)

FORM 8

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. LEASE DESIGNATION AND SERIAL NUMBER: ML 47084

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ DRY ☐ OTHER

7. UNIT or CA AGREEMENT NAME: N/A

b. TYPE OF WORK: NEW WELL ☑ HORIZ. LATS. ☐ DEEP-EN ☐ RE-ENTRY ☐ DIFF. RESVR. ☐ OTHER

8. WELL NAME and NUMBER: Big Pack 12-21-22-2

2. NAME OF OPERATOR: Enduring Resources, LLC

9. API NUMBER: 4304736423

3. ADDRESS OF OPERATOR: 475 17th St, Suite 1500 CITY Denver STATE CO ZIP 80202

PHONE NUMBER: (303) 573-1222

10 FIELD AND POOL, OR WILDCAT: Wildcat

4. LOCATION OF WELL (FOOTAGES)
AT SURFACE: 1,925' FNL - 2,097' FWL S.L.B.& M.
AT TOP PRODUCING INTERVAL REPORTED BELOW: 1,925' FNL - 2,097' FWL
AT TOTAL DEPTH: 1,925' FNL - 2,097' FWL

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENW 2 12S 21E

12. COUNTY: Uintah

13. STATE: UTAH

14. DATE SPUDDED: 12/22/2005

15. DATE T.D. REACHED: 1/6/2006

16. DATE COMPLETED: 2/28/2006 ABANDONED ☐ READY TO PRODUCE ☑

17. ELEVATIONS (DF, RKB, RT, GL): RKB - 6106'

18. TOTAL DEPTH: MD 8,850 TVD 8,850

19. PLUG BACK T.D.: MD 8,827 TVD 8,827

20. IF MULTIPLE COMPLETIONS, HOW MANY? * 3

21. DEPTH BRIDGE PLUG SET: MD TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)
Previously Submitted

23.
WAS WELL CORED? NO ☑ YES ☐ (Submit analysis)
WAS DST RUN? NO ☑ YES ☐ (Submit report)
DIRECTIONAL SURVEY? NO ☑ YES ☐ (Submit copy)

24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
20"	14"	Line Pipe	0	40		3yds		0	0
12-1/4"	8-5/8 J-55	24#	0	2,219		CL G 670	249	0	0
7-7/8"	4-1/2 N-80	11.6#	0	8,826		Poz 1,410	511	1900 (CAL)	0

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8"	7,481							

26. PRODUCING INTERVALS MVRD

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)
(A) Mesaverde	6,734	6,743		
(B) Mesaverde	7,454	7,516		
(C) Mesaverde	7,545	7,553		
(D)				

27. PERFORATION RECORD

INTERVAL (Top/Bot - MD)		SIZE	NO. HOLES	PERFORATION STATUS
6,742	6,743	1'slot	1	Open ☑ Squeezed ☐
7,485	7,486	1'slot	1	Open ☑ Squeezed ☐
7,550	7,551	1'slot	1	Open ☑ Squeezed ☐
				Open ☐ Squeezed ☐

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
6742' - 6743'	89,860 lbs 20/40 Ottawa Sand
7485' - 7486'	79,900 lbs 20/40 Ottawa Sand
7550' - 7551'	80,700 lbs 20/40 Ottawa Sand

29. ENCLOSED ATTACHMENTS:
☐ ELECTRICAL/MECHANICAL LOGS ☐ GEOLOGIC REPORT ☐ DST REPORT ☐ DIRECTIONAL SURVEY
☐ SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION ☐ CORE ANALYSIS ☐ OTHER:

30. WELL STATUS: Producing

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MAY 01 2006
DIV. OF OIL, GAS & MINING

(5/2000)

(CONTINUED ON BACK)

31. INITIAL PRODUCTION — **INTERVAL A (As shown in Item #26)**

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
3/17/2006	4/17/2006	720		15	110	46	30 day ave.

CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:
64	586									Producing

INTERVAL B (As shown in Item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:

CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL C (As shown in Item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:

CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL D (As shown in Item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:

CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
Wasatch	3,575				
Mesaverde	5,917				
Sego	8,100				
Buck tongue	8,183				
Castlegate	8,222				
Blackhawk	8,451				

35. ADDITIONAL REMARKS (Include plugging procedure)

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) Christian Veillette TITLE Engineer

SIGNATURE  DATE 4/27/2006

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

(5/2000)

FORM 9

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER: ML 47084
6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A
7. UNIT or CA AGREEMENT NAME: N/A
8. WELL NAME and NUMBER: Big Pack 12-~~21~~1-22-2
9. API NUMBER: 4304736423
10. FIELD AND POOL, OR WILDCAT: Wildcat

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER
2. NAME OF OPERATOR: Enduring Resources, LLC
3. ADDRESS OF OPERATOR: 475 17th St, Suite 1500 CITY Denver STATE CO ZIP 80202 PHONE NUMBER: (303) 350-5114
4. LOCATION OF WELL
FOOTAGES AT SURFACE: 1,925' FNL - 2,097' FWL S.L.B.& M. COUNTY: Uintah
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENW 2 12S 21E STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☑ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start: _____	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☑ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion: 4/20/2007	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☑ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☐ OTHER: _____
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

In order to prevent waste of gas, as defined by law; to protect the correlative rights of all parties concerned; to prevent the drilling of un-necessary wells; and to insure proper and efficient development and promote conservation of the gas resources of the State of Utah, Enduring Resources, LLC respectfully request approval to perforate and commingle the Wasatch and Mesaverde formations "pools" in the same well bore.

1. Ownership in both formations is the same. However, in the event allocation of production is necessary, that allocation will be based on proportionate net pay based on well logs.
2. These formations shall be commingled in the well bore and produced concurrently in a single string of 2-3/8" production tubing.
3. Attached is a map showing the location of wells on contiguous oil and gas leases and/or production units.
4. Also attached is an affidavit confirming that this application has been provided to leasehold interest owners in contiguous oil and gas lease or production units overlying the "pool."

COPY SENT TO OPERATOR
Date: 5/22/07
Initials: CHD

NAME (PLEASE PRINT) Alvin R. (Al) Arlian TITLE Landman - Regulatory Specialist

SIGNATURE _____ DATE 4/20/2007

(This space for State use only)

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 5/17/07
BY: _____

(See Instructions on Reverse Side)

RECEIVED
APR 24 2007
DIV. OF OIL, GAS & MINING

(5/2000)

ENDURING RESOURCES, LLC
425 Seventeenth Street, Suite 1500
Denver, Colorado 80202
Telephone: 303-573-1222
Facsimile: 303-573-0461

October 20, 2005

The Houston Exploration Company
1100 Louisiana, Suite 2000
Houston, Texas 77002

CERTIFIED MAIL
ARTICILE NO: 7006 2760 0002 2926 3509

Attention: Land Department

RE: Commingling Application
Big Pack 12-21-22-2
1,925' FNL - 2,097' FWL (SENW) Section 2, T12S-R21E
Uintah County, Utah

Dear Leasehold Interest Owner:

Enduring Resources, LLC ("Enduring") has filed an application with the State of Utah Division of Oil, Gas, and Mining requesting approval of the Wasatch and Mesaverde formations (pools) in the above-referenced well to be commingled.

Ownership in both formations is the same. However, in the event allocation of production is necessary, that allocation will be based on proportionate net pay based on well logs. These formations (pools) shall be commingled in the well's well bore.

Attached is a map showing the location of wells on contiguous oil and gas leases and/or production units. Also attached is an affidavit confirming that this application has been provided to leasehold interest owners in contiguous oil and gas leases or production units overlying the commingled pools (commingled formations).

Should you have any questions concerning this matter, please do not hesitate to call (303-350-5114)

Very truly yours

ENDURING RESOURCES, LLC

Alvin R. (Al) Arlian
Landman – Regulatory Specialist

ara/

Attachments as stated:

AFFIDAVIT OF MAILING

Statue of Colorado)
City and)ss.
County of Denver)

Alvin R. Arlian (hereinafter sometimes referred to as "Affiant"), of lawful age, being first duly sworn upon oath, deposes and says:

1. Affiant is a Landman-Regulatory Specialist for Enduring Resources, LLC (hereinafter sometimes referred to as "Enduring") whose address is 475 17th Street, Denver, Colorado 80202,

2. Enduring is the operator of the following described oil and gas well:

   Big Pack 12-21-22-2
   1,925' FNL - 2,097' FWL (SENW) Section 2, T12S-R21E
   Uintah County, Utah

3. A cursory search of applicable records confirmed that the following parties are the only leasehold interest owners in the contiguous oil and gas wells, contiguous oil and gas leases, or contiguous oil and gas well production units overlying the "pool."
   1. The Houston Exploration Company
   2.
   3.
   4.

4. On Friday, April 20, 2007 Affiant mailed (or caused to be mailed) in U.S. Mail, with postage prepaid, a copy of the attached Application for Commingling two or more pools (formations) in one well bore of the well described in Paragraph No. 2 above which said Application for Commingling (Form 9) has/had concurrently been filed with the State of Utah Division of Oil, Gas, and Mining (and if applicable, copies sent to SITLA, and the Bureau of Land Management), and

5. Attached is a map showing the location of wells' located on contiguous oil and gas leases and/or production units.

Affiant saith no more.

Alvin R. Arlian, Affiant

Scribed and sworn to before me this 20th day of April, 2007 by Alvin R. Arlian.

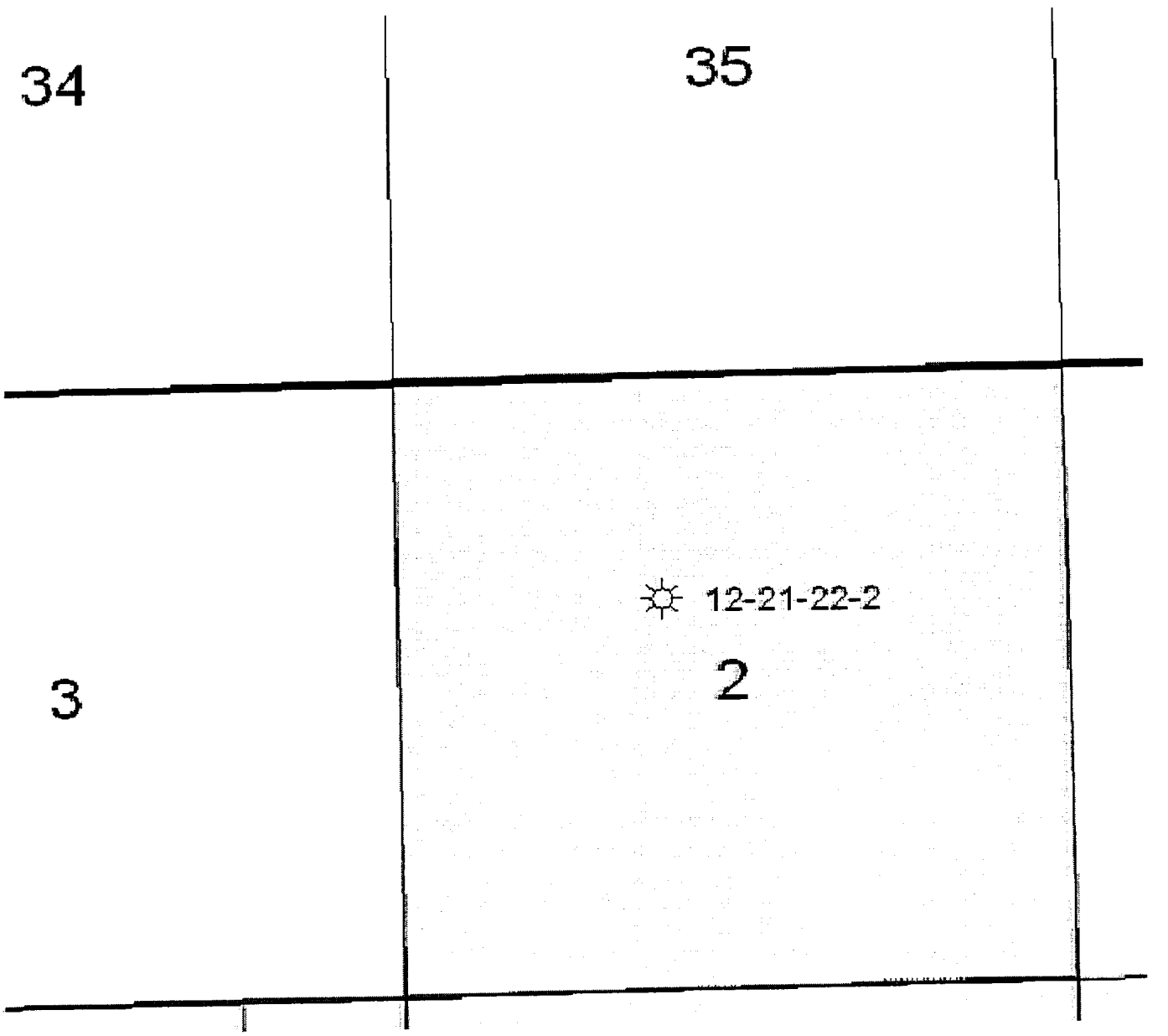
3/16/2009
My Commission Expires:

SHANNON McNAMARA NOTARY PUBLIC STATE OF COLORADO

Notary Public.

RECEIVED
APR 24 2007
DIV. OF OIL, GAS & MINING

MAP ATTACHED TO ENDURING RESOURCES, LLC COMMINGLING APPLICATION FOR BIG PACK 12-21-22-2 LOCATED IN THE SE-NW SEC. 2, T12S-R21E



FORM 9

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

5. LEASE DESIGNATION AND SERIAL NUMBER: ML 47084

SUNDRY NOTICES AND REPORTS ON WELLS

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

7. UNIT or CA AGREEMENT NAME: N/A

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER

8. WELL NAME and NUMBER: Big Pack 12-21-22-2

2. NAME OF OPERATOR: Enduring Resources, LLC

9. API NUMBER: 4304736423

3. ADDRESS OF OPERATOR: 475 17th St, Suite 1500 CITY Denver STATE CO ZIP 80202

PHONE NUMBER: (303) 350-5114

10. FIELD AND POOL, OR WILDCAT: Wildcat

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 1,925' FNL - 2,097' FWL S.L.B.& M.

COUNTY: Uintah

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENW 2 12S 21E

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start:	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☑ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☑ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
10/19/2009	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: Workover - land tubing higher.
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Commencing 10-1-2009

1. MIRU, swab, run JDC to 7,490'.
2. Tubing stuck in Sand.
3. Raised tubing from 7,513' to 7,158'.
4. Released rig and turned well back to sales and Pumper.

NAME (PLEASE PRINT) Alvin R. (Al) Arlian TITLE Landman - Regulatory Specialist

SIGNATURE [signature] DATE 1/19/2009

(This space for State use only)

RECEIVED
JAN 28 2009
DIV. OF OIL, GAS & MINING

(5/2000) (See Instructions on Reverse Side)

Well Name : BIG PACK 12-21-22-02					
Prospect:				AFE #:	DV00008
Sec/Twp/Rge:	2 / 12S / 21E			AFE Total:	$1,675,700
API #:	430473642300	Field:	Utah	This AFE Cost:	$1,312,216
Work Type:	Completion	County , St.:	UINTAH, UT	Tot Assoc AFE's:	$1,312,216
Operator:	Enduring Resources LL(	Supervisor:	Martin	Phone:	435-621-1853
Production Current/Expected	Oil: 0 / 0	Gas:	0 / 0	Water:	0 / 0

Date :	10/1/2008	Days:	962	DC :	$0	CCC:	$528,393	CWC:	$1,305,405
Activity:	Swabbing			Rig Name:					
Daily Report Summary :									
Daily Report Detail:	ISIP 900/900. Blow to tank for 2 hours. Made two swab runs from 4266' (12 bbls). Blow to tank fro 1 hour. Make 5 swab runs from 7220' (7bbls). Blow to tank dor 3 hours. Run JDC to 7490'. No fish. Try impression block. Rental company sent wrong size. Leave csg/tbg equalized overnight. FSIP 600/600. RDMO Swabbing Unit.								
Date :	10/6/2008	Days:	967	DC :	$0	CCC:	$528,393	CWC:	$1,305,405
Activity:	Wireline			Rig Name:					
Daily Report Summary :									
Daily Report Detail:	MIRU C and S Swabbing. Press 280/650. Run impression block to 7548'. No impression. Ran sinker bar and swab mandrell to 7548' (WLM). Stuck in sand. Jar free. COOH swab mandrel coated in sand. Need to raise tbg to get out of sand. Perf's possibly covered in sand as well. EOT according to previous report @ 7,513 KB and CompBP @ 7594' KB.								
Date :	11/18/2008	Days:	1010	DC :	$1,670	CCC:	$530,063	CWC:	$1,307,075
Activity:	MIRU Rig			Rig Name:	Basic Rig # 1629				
Daily Report Summary :									
Daily Report Detail:	Remarks moved rih from Haning Rock 11-23-34-36 to location miru rig left well to sale over night to bled well down								
From 13:00 To 16:30	3.5 hrs	Category/Rmks:	Move In / Rig UP : moved rih from Haning Rock 11-23-34-36 to location miru rig left well to sale over night to bled well down						
Date :	11/19/2008	Days:	1011	DC :	$5,141	CCC:	$535,204	CWC:	$1,312,216
Activity:	LD Tbg			Rig Name:	Basic Rig # 1629				
Daily Report Summary :	tbg was raised 10 jts no fluid was pumped down well as tbg bled off tbg was not drifted do to well tried to flow as well head was installed								
Daily Report Detail:	Remarks safety meeting w/ rig crew fwp 300 psi bled off tbg left csg pressure on well tbg died n.d well head tree n.u bops NOTE one jam screw very hard to come out tbg hanger stuck in well head n.d bops poured penetrating oil in well head n.u bops worked hanger free laid down 10 jts tbg on trailer tally of 323.15' landed tbg on hanger X_Nipple @ 7158' EOT @ 7190' n.d bops n.u well head tree Please note well tried to flow as well head was installed r.d prepped & moved rig to DWR 12-23-31-21 location								
From 7:00 To 7:15	.25 hrs	Category/Rmks:	Safety Meeting : safety meeting w/ rig crew						
From 7:15 To 7:30	.25 hrs	Category/Rmks:	Blow Down Tubing : fwp 300 psi bled off tbg left csg pressure on well tbg died						
From 7:30 To 8:15	.75 hrs	Category/Rmks:	Nipple Down : n.d well head tree n.u bops NOTE one jam screw very hard to come out						
From 8:15 To 10:35	2.33 hrs	Category/Rmks:	Waiting : tbg hanger stuck in well head n.d bops poured penetrating oil in well head n.u bops worked hanger free						
From 10:35 To 10:50	.25 hrs	Category/Rmks:	TOOH : laid down 10 jts tbg on trailer tally of 323.15' landed tbg on hanger X_Nipple @ 7158' EOT @ 7190'						
From 10:50 To 11:20	0.5 hrs	Category/Rmks:	Nipple Down : n.d bops n.u well head tree Please note well tried to flow as well head was installed						
From 11:20 To 12:30	.17 hrs	Category/Rmks:	Rig Down : r.d prepped & moved rig to DWR 12-23-31-21 location						

Casing

DateIn	Setting Depth	Jts Run	Type	Size	Weight	Grade	MINID	HoleDiam	TD
8/29/2005	2219.1	50	3. Surface	8.625	24	J-55	0	12.25	2260

Stage: 1, , 0, 50, 3% CaCl2, 1/4# flocele, Class G, 1.15, 15.8
Stage: 1, , 0, 100, 3% CaCl2, 1/4# flocele, Class G, 1.15, 15.8
Stage: 1, Tail, 0, 1850, 2% CaCl2, 1/4# flocele, Class G, 1.15, 15.8
Stage: 1, Lead, 0, 270, 16% gel, 1/4# flocele, Class G, 3.5, 11.1

Well Name : BIG PACK 12-21-22-02					
Prospect:				AFE #:	DV00008
Sec/Twp/Rge:	2 / 12S / 21E			AFE Total:	$1,675,700
API #:	430473642300	Field:	Utah	This AFE Cost:	$1,312,216
Work Type:	Completion	County , St.:	UINTAH, UT	Tot Assoc AFE's:	$1,312,216
Operator:	Enduring Resources LL(	Supervisor:	Martin	Phone:	435-621-1853
Production Current/Expected	Oil:	0 / 0	Gas:	0 / 0	Water: 0 / 0

1/10/2006	8826.61	208	5. Production	4.5	11.6	N-80	0	7.875	8850
Stage: 1, Wash, 20, 0, MUD FLUSH, , 0, 0									
Stage: 1, Spacer, 20, 0, H2O SPACER, , 0, 0									
Stage: 1, Lead, 0, 400, PREM LITE II + .25#/sk CELLO FLAKE+ 5 #/sk GILSINITE + 10% GEL + .5% EXTENDER + 3 % KCL, Lightweight, 3.91, 11									
Stage: 1, Tail, 0, 1010, 50/50/POZ + 10% SALT +2% GEL + 1% R-3, Pozmix, 1.29, 14.1									
Stage: 1, Wash, 136, 0, FRESH WATER1%+shale saver, , 0, 0									

Perforation

Date:	Formation	Perf Status	Upper Perf	Lower Perf	Sht / Ft	Description:
2/13/2006	Blackhawk	Open	8731	8742	3	
2/28/2006	Mesaverde	Open	7550	7551	0	HES Cobra frac, 1200 lbs of sand.
2/28/2006	Mesaverde	Open	7457	7458	0	HES Cobra frac, 1200 lbs of sand.
2/28/2006	Mesaverde	Open	6741	6742	0	HES Cobra frac, 1200 lbs of sand.

FORM 9

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

5. LEASE DESIGNATION AND SERIAL NUMBER: ML 47084

SUNDRY NOTICES AND REPORTS ON WELLS

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A

7. UNIT or CA AGREEMENT NAME: N/A

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER

8. WELL NAME and NUMBER: Big Pack 12-21-22-2

2. NAME OF OPERATOR: Enduring Resources, LLC

9. API NUMBER: 4304736423

3. ADDRESS OF OPERATOR: 475 17th St, Suite 1500 CITY Denver STATE CO ZIP 80202

PHONE NUMBER: (303) 350-5114

10. FIELD AND POOL, OR WILDCAT: Wildcat

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 1,925' FNL - 2,097' FWL S.L.B.& M.

COUNTY: Uintah

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENW 2 12S 21E

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☑ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start: 11/10/2005	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: Name Correction.
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

On November 10, 2005, a name change from Big Pack 12-21-22-2, to Big Pack 12-2-22-2 was inadvertently filed.

Please change well

From: Big Pack 12-2-22-2

To: Big Pack 12-21-22-2

NAME (PLEASE PRINT) Alvin R. (Al) Arlian TITLE Landman - Regulatory Specialist

SIGNATURE DATE 4/27/2009

(This space for State use only)

RECEIVED
APR 30 2009
DIV. OF OIL, GAS & MINING

(5/2000) (See Instructions on Reverse Side)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER:
ML 47084

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Gas Well

8. WELL NAME and NUMBER:
BIG PACK 12-21-22-2

2. NAME OF OPERATOR:
Enduring Resources, LLC

9. API NUMBER:
43047364230000

3. ADDRESS OF OPERATOR:
511-16th Street, Suite 700 , Denver, CO, 80202

PHONE NUMBER:
303 350-5114 Ext

9. FIELD and POOL or WILDCAT:
BUCK CANYON

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
1925 FNL 2097 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SENW Section: 02 Township: 12.0S Range: 21.0E Meridian: S

COUNTY:
UINTAH

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 9/21/2016	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	✓ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

P&A Procedure attached.

Approved by the
Utah Division of
Oil, Gas and Mining

Date: September 19, 2016

By: Dark K Quist

Please Review Attached Conditions of Approval

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Travis Whitham	303 350-5716	Landman
SIGNATURE		**DATE**
N/A		9/13/2016

RECEIVED: Sep. 13, 2016

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Sundry Conditions of Approval Well Number 43047364230000

1. Notify the Division at least 24 hours prior to conducting abandonment operations. Please call Dan Jarvis at 801-538-5338.

2. All balanced plugs shall be tagged to ensure they are at the depths specified in the procedure.

3. All annuli shall be cemented from a minimum depth of 100’ to the surface.

4. Surface reclamation shall be done in accordance with R649-3-34 – Well Site Restoration.

5. All requirements in the Oil and Gas Conservation General Rule R649-3-24 shall apply.

6. If there are any changes to the procedure or the wellbore configuration, notify Dustin Doucet at 801-538-5281 (ofc) or 801-733-0983 (home) prior to continuing with the procedure.

7. All other requirements for notice and reporting in the Oil and Gas Conservation General Rules shall apply.

RECEIVED: Sep. 19, 2016

9/19/2016

Wellbore Diagram

r263

API Well No: 43-047-36423-00-00 **Permit No:** **Well Name/No:** BIG PACK 12-21-22-2

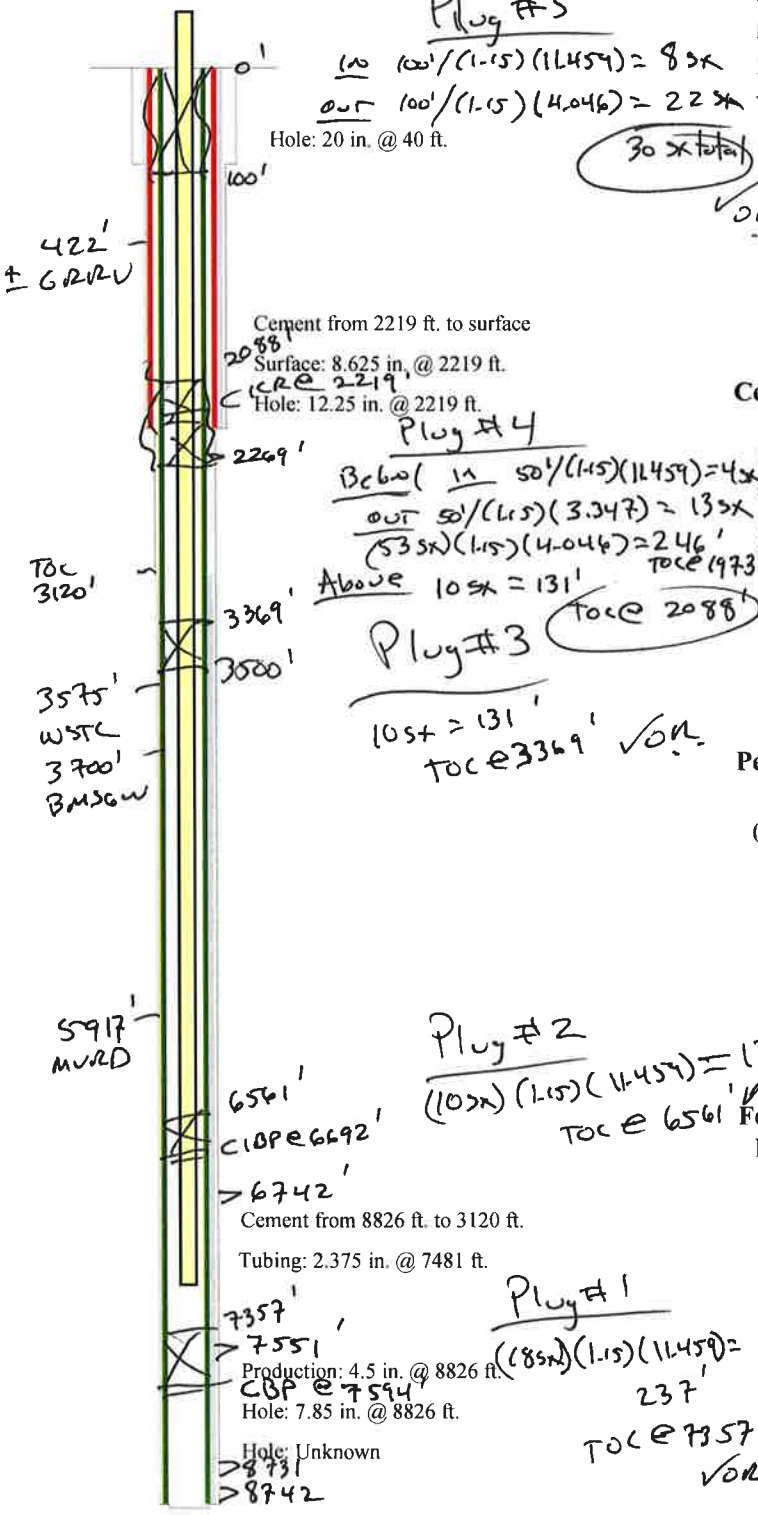
Company Name: ENDURING RESOURCES, LLC

Location: Sec: 2 T: 12S R: 21E Spot: SENW

Coordinates: X: 625269 Y: 4407090

Field Name: BUCK CANYON

County Name: UINTAH



String Information

String	Bottom (ft sub)	Diameter (inches)	Weight (lb/ft)	Length (ft)	Capacity (ft/cf)
HOL1	40	20			
HOL2	2219	12.25			
SURF	2219	8.625	24		
HOL3	8826	7.85			
PROD	8826	4.5	11.6		11.459
T1	7481	2.375			

8 5/8" x 4 1/2" → 4.046

7 7/8" x 4 1/2" (108) → 3.347

Cement Information

String	BOC (ft sub)	TOC (ft sub)	Class	Sacks
PROD	8826	3120	50	1410
SURF	2219	0	HG	270
SURF	2219	0	G	400

Perforation Information

Top (ft sub)	Bottom (ft sub)	Shts/Ft	No Shts	Dt Squeeze
6742	7551			

Formation Information

Formation	Depth
GRRV	422
WSTC	3575
BMSW	3700
MVRD	5917
SEGO	8100
BUKTG	8183
CSLGT	8222
BLKHK	8451

TD: 8850 **TVD:** 8850 **PBTD:** 8827

MAGNA ENERGY SERVICES

Recommended Procedure ***Plug and Abandonment***

Operator:	Enduring Resources, LLC		
Well name:	Big Pack #12-21-22-02		
Legal:	SENW, Section 2, Township 12 South, Range 21 East		
Location:	Uintah County, Utah		
API:	43-047-36[redacted]423		
Surface:	8-5/8" 24# at 2,219'	**Hole size:** 12-1/4"	**TOC:** Surface
Production:	4-1/2" 11.6# at 8,826'	**Hole size:** 7-7/8"	**TOC:** 3,120' (CBL)
Tubing:	2-3/8" 4.7# at 7,190		
Perforations:	6,742', 7,458', & 7,550' (Mesaverde); 8,731' – 8,742' (Blackhawk)		
PBTD:	7,594' (Existing FTCBP)		
TD:	8,850'		

Procedure based off of operator provided wellbore diagram and history, this is NOT a final procedure

1. Conduct pre-job safety meeting and complete daily JSA
2. Prior to MIRU, check rig anchors and blow down well/kill if necessary
3. Dig out around wellhead and check surface annulus for pressure
   (If present call Tommy Joyce #817-933-9759 and Craig Owen #970-646-3933 for orders)
4. MIRU P&A equipment, NDWH, NUBOP, Load and circulate wellbore clean
5. TOH and tally 7,190' of tubing to derrick, PU 404' of 2-3/8" 4.7# workstring
6. TIH to 7,594' and tag existing FTCBP
7. Pump 18 sxs of 15.8# class G neat 1.15 cu.ft./sack yield cement on top covering Blackhawk perfs/FTCBP
   (18 sxs is 237' in 4-1/2", TOC: 7,357')
8. TOH and LD to 7,250', Reverse circulate tubing clean,
9. Pump 10 bbl. of water treated with corrosion inhibitor to 6,766'
10. TOH, Stand back 6,692'
11. PU 4-1/2" 11.6# casing scraper/bumper sub, TIH to 6,692', TOH, LD BHA
12. PU 4-1/2" 11.6#, 10K, CIBP, TIH and set at 6,692' (50' above topmost Mesaverde Notch)
13. Pump 10 sxs of 15.8# class G neat 1.15 cu.ft./sack yield cement on top of CIBP
    (10 sxs is 131' in 4-1/2", TOC: 6,561')
14. TOH and LD to 6,450', Reverse circulate tubing clean, Pressure test casing to 500 psi for 5 minutes
    (If test fails call Tommy Joyce and Craig Owen for orders)

Note: If casing pressure test fails (step 14) additional steps/services required by the Utah DOGM/BLM are not included in this bid and will be billed per our 2016 Time and Material Price Schedule.

15. Circulate 100 bbl. of water treated with corrosion inhibitor
16. TOH and LD to 3,500' (75' below top of Wasatch)
17. Pump 10 sxs of 15.8# class G neat 1.15 cu.ft./sack yield cement to cover top of Wasatch
    (10 sxs is 131' in 4-1/2", TOC: 3,369')
18. TOH and LD to 3,250', Reverse circulate tubing clean
19. TOH, Stand back 2,219'
20. RU wireline, TIH and perforate casing at 2,269', TOH, RD wireline
21. Establish IR/circulation to surface via perforations
22. PU 4-1/2" 11.6#, 10K, CICR, TIH and set at 2,219', Establish IR into CICR
    (If not able to establish IR call Tommy Joyce and Craig Owen for orders)
23. Pump 80 sxs of 15.8# class G neat 1.15 cu.ft./sack yield cement, 70 sxs under and 10 sxs on top
    (4 sxs is 52' in 4-1/2", 10 sxs is 50' in 4-1/2" x 7-7/8", 21 sxs is 104' in 4-1/2" x 8-5/8" with 100% excess)
    (10 sxs is 131' in 4-1/2", TOC: 2,088')
24. TOH to 1,950', Reverse circulate tubing clean
25. TOH and LD to 100', Establish circulation to surface

26. Circulate 8 sxs of 15.8# class G neat 1.15 cu.ft./sack yield cement to surface
27. TOH and LD tubing, Dig out and cut off wellhead 6' below restored ground level
28. TIH 100' in 4-1/2" x 8-5/8" with 1" tubing, Establish circulation to surface
29. Circulate 21 sxs of 15.8# class G neat 1.15 cu.ft./sack yield cement to surface
30. TOH and LD tubing, RDMO, Top off if necessary, Weld on info plate, backfill, clean location, P&A complete

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: ML 47084

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Gas Well

8. WELL NAME and NUMBER:
BIG PACK 12-21-22-2

2. NAME OF OPERATOR:
Enduring Resources, LLC

9. API NUMBER:
43047364230000

3. ADDRESS OF OPERATOR:
511-16th Street, Suite 700 , Denver, CO, 80202

PHONE NUMBER:
303 350-5114 Ext

9. FIELD and POOL or WILDCAT:
BUCK CANYON

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
1925 FNL 2097 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SENW Section: 02 Township: 12.0S Range: 21.0E Meridian: S

COUNTY:
UINTAH

STATE:
UTAH

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CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

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	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Plugging report attached. Well waiting on reclamation and re-seeding planned next spring.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
September 27, 2016

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Travis Whitham	303 350-5716	Landman
SIGNATURE		**DATE**
N/A		9/26/2016

RECEIVED: Sep. 26, 2016

Enduring Resources
Chronological Plugging Report
Big Pack 12-21-22-02

9/21/16
HSM RU H2S Moved in rig and RU Rig, worked on well head bolts, changed over to 2 3/8 equipment: Worked on Rig

9/22/16
Notified Richard Powell with intent To plug on 9/19/16 FTB & CSG pis 150. HSM weather & H2S. Bled well down, pumped 35 bbls H2o with H2s Scavenger down TBG. 80 BBLS down Csg. Pumped 20 bbls fresh down TBG. ND wellhead NU BOPES. Ru floor tongs etc. Un land TBG ,TOOH with 223 Jts PSN 1 JT With NC. RIH with NC and 2 3/8 tagged CIBP @ 7594, LD to 7584 Spot 10 bbl corr Inhib , 1 bbl fresh Mixed and pumped 18 sxs 3.7 bbls cmt, 1.15 Yield,15.8 ppg displaced with 27.5 bbls. 237' plug to 7,347' Witnessed by Richard Powell. LD 27 Jts, POOH LD, NC. RIH with 4 1/2" csg scraper to 4,040' SWIFN

9/23/16
HSM: Tripping
EOT: 4040, SIT & CSG psi 0
Pumped 10 bbls Down TBG, RIH w/ Scraper to 6,709' POOH LD scraper RIH w/ 4 1/2" CIBP. Set @ 6680'. Displaced hole with corr Inhib. Test csg to 550 psi, 5 min good. Spot 10 sx plug on CIBP. Mixed 10 sxs , 2.04 bbls , 1.15 yield 15.8 ppg Displaced w/ 24 bbls corr Inhib.131' plug to 6549' LD to 3514' filled hole, spot 10 sx 2.04 bbls, 1.15 yield, 15.8 ppg. Displaced w/ 13 bbl, corr Inhib, top of plug 3,383' LD to 2,181'. Pooh RU The Perforators, perfed @ 2,271-73. RD WL filled hole established injection rate 1 BPM 600 psi. RIH with CICR set @ 2214 SWIFN
Witnessed By Richard Powell

9/24/16
HSM: RD
CITP & CSG PSI 0
Filled Cement container, Mixed and pumped 80 sxs, Pumped 70 sxs. 14.3 bbls below retainer, stung out left 10 sxs 2.04 bbls, on top. Stung out with 1300 psi below retainer. Cement top @ 2083. All cement mixed @ 1.15 yield, 15.8 ppg. Layed down To 131' mixed and pumped 12.5 sxs, 2.56 bbls, to fill 4 1/2, 1.15 yield 15.8 ppg. LD TBG RD floor tongs etc. ND BOPES. Plugs were witnessed by Richard Powell.Wait for Hydraulic Raising Ram For Derrick.

9/25/16
HSM. Cutting off well head
0 psi on well. Finished repairs On Raising Ram 1 Hr. RD RIG. Dug out around well head. Cut off 9 5/8" x 4 1/2" csg tbd head. Filled 4 1/2" csg with cement. Filled 9 5/8 x 4 1/2 with 3 bbls H2O, RIH with 1" couldn't get any deeper, mixed and pumped 14.5 sxs, 3 bbls, 1.15 yield 15.8 ppg: Filled annular hole staying full. Weld on P & A marker. Moved Rig to Buck Camp 11-22-11-36.

RECEIVED: Sep. 26, 2016